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THE WORLD BANK**

**Hungary in the 1980s: A Review of National  
and Urban Level Economic Reforms**

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and Maria Floro**

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**WORKING PAPER**

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## INTRODUCTION

This paper is one a number of economic and social policy background papers written as part of the research project on "Urban Poverty and Social Policy in the Context of Adjustment." This is being undertaken by the Urban Division of the World Bank in Ecuador, Hungary, the Philippines, and Zambia.

The purpose of this paper is to describe the economic reforms in Hungary during the period 1968–1991. The review identifies and examines change at the macro level as well as the urban level. The paper intentionally uses both World Bank and other sources, many from Hungary itself, to present different perspectives on Hungary's economic reform process during the past decade. It focuses on the important economic changes and their potential impacts on urban low-income communities during the period of reform.

There are three parts to this paper. The first section examines the overall structure of the economy as well as pertinent economic, demographic, and social indicators. Section two carefully examines the origins of the economic crisis faced by Hungary in the early eighties and then traces the reform path embarked on by the Hungarian government. Since the adjustment process is shaped by historical factors, the direction as well as pace of the reforms are discussed in the context of the initial conditions described in the first section. The third section provides a summary of the national and urban level changes as a result of the macroeconomic reform process undertaken by the Hungarian government.

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## **I. STRUCTURE OF THE ECONOMY AND ECONOMIC PERFORMANCE**

### **Resource Endowments**

1.1 Hungary occupies 93,000 square kilometers and has a population of 10.6 million. It is a landlocked country located in the middle-Danube region. The country has substantial quantities of bauxite and some amount of uranium, coal, oil and natural gas. Its population density of 114 persons per square kilometer makes it one of Europe's most densely populated countries. In 1989, the average per capita income GNP of Hungary was \$2,590, making it an upper-middle income country.<sup>1</sup> Of the 3,000 townships in the country about 1,800 are situated in the Trans-Danubian the Small Plain regions, another 500 townships are in the Northern Hill Range, and 950 townships are in the Great Plain.

1.2 Hungary has limited natural resources; the skill-level of its 10.6 million people is its principal economic asset. Between 1960 and 1981, Hungary's population increased on average by only 0.35 percent a year (World Bank, 1983). The turning point in the demographic situation occurred in 1981. The proportion of live births began to decrease after the second half of the 1970's while the rate of deaths increased slowly and thus the natural population growth rate became negative.<sup>2</sup> These trends explain the decline in the total population of approximately 90,000 between 1982 and 1987 (see Table 1). The negative rate of population growth is reflected in a population structure that has remained fairly stable over the past two decades. The distribution of the population reflects an aging population: 22 percent is under 15 years of age, 61 percent is between 15 and 59 years, and 17 percent is 60 and over (see Table 2).

1.3 In terms of geographical dispersion, the population is distributed unevenly throughout the country. The proportion of urban population is almost 60 percent, with a quarter of the population living in Budapest. The number and the proportion of population living in the urban areas have increased between 1982 and 1987 as a consequence of the steady rate of rural-urban migration and of the increase in the natural population in towns and cities. The village population, in contrast, has been slowly but steadily decreasing. Another factor that led to the rapid urbanization of Hungary is that the number of towns and cities increased after the Second World War as more and more villages were granted town rights and were integrated into the urban development process (Social Report, 1990).

### **Sectoral Composition of the Economy**

1.4 Hungary is an industrialized country, with industry accounting for about 32 percent of GDP 1990 (see Table 3). Compared to other countries that used to comprise the Socialist Bloc, Hungary is heavily integrated to the world market. Taken together, its exports and imports represented about 60 percent of GDP in 1990. The principal economic activities mainly operate

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1. The figure is based on the World Bank methodology (World Development Report, 1991, p. 204).

2. The increase in the rate of deaths was primarily due to the increasing dominance of older age groups in the age composition of the whole of the population.

in the socialist sector of state-owned enterprises and cooperatives. The manufacturing subsectors including machinery and engineering products, building materials, chemicals, light industry and food processing—comprised nearly 80 percent of industrial production.

1.5 Agriculture and forestry accounted for 13–17 percent of GDP and 18 percent of total employment during the period 1982–87 (see Table 4). Its major products are pork, wheat, corn, poultry, milk, beef, fruits and vegetables. About two thirds of employment in agricultural enterprises were in primary agriculture while the remainder were employed in ancillary non-agricultural activities such as food processing and services. Small farms accounted for about 14 percent of cultivated area but 50 percent of value-added. So far, the agricultural sector has been able to meet the objective of self-sufficiency and has even provided a net surplus for exports. The service sector (or referred to as the non-material branches) contributed roughly 14 percent of GDP as of 1987, as shown in Table 4. The largest component of the service sector was the health and other social services provided by the State, followed by personal and economic services.

1.6 With respect to expenditures pattern, in 1990, total private consumption comprised nearly 61 percent of GDP as shown in Tables 3 and 5, while domestic investment comprised 24 percent. In terms of overall rate of growth, however, Hungary has experienced a steady decline in GDP (at constant prices). Enjoying a high 6.3 percent growth during the late-sixties and early seventies, this declined to 4.0 percent in the seventies and a further drop to 1.8 percent in the eighties. In 1989, Hungary's growth rate became negative. The decline in growth rate is largely explained by the rapid decline in domestic investment in recent years (-13.3 percent in 1990). Consumption expenditures decreased at a less rapid rate than the overall decline in GDP (-12.9 percent in 1990).

1.7 Although the public sector dominates the Hungarian economy, there has been a rapidly growing, small but dynamic "second economy. This second economy includes both formal and informal activities such as agricultural food plots, tourism (e.g. bed and breakfast provision), crafts, retail trade, residential construction and catering. The business is usually performed by the owner alone, with the help of family members or a few hired employees. In 1984, Kornai estimated that about one-third of working hours were spent in the second economy and that the informal private sector might add 20 percent or more to official GDP (World Bank, 1986a).

### **System of Ownership**

1.8 Until 1990, Hungary's economy comprised mainly of the state and cooperative sectors which accounted for 90 percent of GDP. Although the private sector constituted roughly 3.4–5.5 percent of GDP during 1982–87, it is considered by some analysts to be the most dynamic sector (see Table 6). This has brought about a gradual change in the structure of production. With respect to the form of economic organization, the private sphere has begun to play an increasing role in production. This was particularly true for the building, agriculture, forestry and service sectors of the economy.

1.9 The contribution of the so-called complementary and independent activities of the population increased by 7 percent annually between 1982–87, a rate that was five times higher than the rate of growth of the parastatal and public spheres. The overall contribution of the private sector to GDP has increased from 11.3 percent in 1982 to 14.6 percent in 1987 (KHS, 1989B). The activities of the private sector are mainly concentrated in the production of consumption goods. The proportion of GDP used for consumption that is produced by the private sector in 1987 was roughly 20 percent. Complementary activities of the population, on the other hand, are significant in agriculture and forestry, taking the form of household farming, as well as in the area of public services. The role of the other part of the private sector (consisting of 'GMKs,' i.e. private economic groups, and independents) is greatest in the building industry especially in the construction of private homes. They also play an important role in the area of other material services particularly in information technology activities (related to computerization).

### **Economic and Social Indicators**

1.10 The population of the country decreased by 90,000 between 1982–87 as mentioned earlier (see Table 1). During the same period, however, the number of households increased which implies that the average size of households has decreased (see Table 7). The decline in the average household size can be attributed to the following: a) the increase in the divorce rate; b) an increase in the number of pensioners' households, and c) the continuing decline in the number of children per family. By 1987, the average size of households dropped to less than three even in the villages. Comparing the relative household size by type of township, the average size was smallest in the capital city, followed by that in provincial towns and cities. The aging of the population was most dramatic in the capital city. The increase of retirees in the population partly explains the decrease in the number of active wage-earners per household. In addition, the number of dependent persons below age 15 dropped in every type of township.

1.11 One of the factors explaining the declining population trend is the decrease in total fertility rate (see Table 8). The crude birth rate has likewise declined, from 18.4 per thousand population in 1970 to 11.7 percent in 1988. The standardized death rate, however, slightly increased over the last 20 years until 1986, then dropped in 1987 (see Tables 1 and 8). Comparing the mortality rates of men and women, Table 1 shows that the mortality rate of men is consistently higher than that of the women. Concomitantly, the life expectancy at birth of men (65.7 years in 1987) is 8 years lower than that of women (see Table 8a).

1.12 Other social indicators in Table 8 provide a favorable picture in the case of Hungary, compared to the other middle income countries. It has a high labor force participation rate, particularly that of the women. Hungary also seems to have provided nearly all of the rural and urban population with access to safe water.

1.13 During the eighties, the extent of poverty remained about the same (14–16 percent) in Hungary (see Table 9). Examining now the poverty rate for various population groups, the poverty rates for workers was between 17 and 18 percent during the period 1985–87 as shown

in Table 10. Pension rates for pensioners and farmers decreased from 14 percent in 1985 to 11 percent in 1987.

1.14 More recently, a poverty study using poverty lines standards based on the 1989 household budget survey was published by the Central Statistics Office. The household survey however included only those families who were willing and able to keep a 'household diary.' It did not include the homeless, atypical, or deviant poor families or those who are incapable of keeping household diaries because of reasons of age or health (Social and Socio-political Magazine, 1991 p. 4). The poverty line at the study was drawn at HUFF 3940 for active households, or 51 percent of the average income for the active households in the survey and at 3640, or 53.5 percent of the average income for the inactive households. The approximate average household income was determined at HUFF 7,500–8,000 for active families and HUFF 6,600–7,000 for inactive families.

1.15 The study reveals that the risk of being poor is about the same for active and inactive households. But there are significant differences between poor and average families in terms of economic activity, age, and levels of education. The proportion of active wage earners (especially women) is far lower among the poor than among those living on average incomes. At the same time, the proportion of dependent persons, especially of children at primary school age 6–14 and younger, is significantly higher among the poor than those living on average incomes. A higher proportion of other dependent persons, such as those persons relying on maternity benefits, is closely related to relatively large families, and to a higher proportion of young children. The fact that the majority of the poor in the active household category are children is revealed when the age distribution characteristics of the poor are taken into account. While the average proportion of children under 14 is 18.5 percent of the population, this ratio is around 41 percent among the poor.

1.16 About 10 percent of all households with active wage earners in Hungary have a low level of education (below primary school completion). This proportion is twice as high among those living below the poverty line. The proportion of the poor households with the household head reaching secondary education is only half the proportion of those households receiving average incomes. This schooling differential between poor and average households widens further at the tertiary education level. The proportion of the poor households with tertiary education is only a quarter of the proportion of average income-receiving households.

1.17 Officially determined poverty lines and social minimum standards are higher in towns and cities than in villages. The reason for this is that urban life tends to be more expensive, especially owing to the higher costs associated with the maintenance of well-equipped homes with modern conveniences. Expenses related to these conveniences have risen considerably in the recent period and the incomes of the majority of wage earners have not managed to keep up with the costs. Another factor is that food has become more expensive and in towns and cities the facility for the use of self-produced goods is far more restricted. In the last few years, poverty has increasingly become an urban phenomenon.

1.18 The composition of the poor according to age and activity reveals some interesting trends. First, a very high proportion (38–39 percent) of the poor are over 70 years of age, while the proportion of younger pensioners is much lower (38–42 percent) than those living on average incomes (56 percent). It is also worth mentioning that the proportion of children is particularly high among those living under the poverty line.

1.19 Households on average are larger among the poor compared to an average household size. First, there are only 150 active earners per 100 households below the poverty line, as compared to 183 in the average income group (see Table 11). Poor women are thus more often either dependents or on maternity allowance. Secondly, the households under the poverty line have three times more dependents than average households. Since the proportion of dependent persons is more than twice as high in the case of poor households, the real per capita income of members in poor households is expectedly quite low.

1.20 The economic situation of pensioners is influenced by two factors. One is the amount of pension that they receive and the other is the number of people living in an average pensioners' household. The amount of the pension is related to the earnings achieved during the active years and the length of time since retirement. The great majority (70 percent) of poor pensioners had education less than 8 classes of primary school. Another 23 percent of them completed a primary education and only 7 percent have received a higher level of education. This obviously influenced their earnings and thus their pensions unfavorably. In sum, one can say that pensioners living under the poverty line are older and less educated than those living on an average income.

1.21 Despite the economic recession faced by Hungary during the eighties, per capita consumption increased by 26 percent from 1978 to 1987 although real wage levels remained constant during the same period. One explanation is the extensive welfare system of Hungary that provided subsidies to nearly all the basic consumption items. Another factor was the rising ratio of pensions to wages (from 48 percent in 1978 to 57 percent in 1987).<sup>3</sup> This took place under conditions of increasing share of pensioners in total population, due to an aging population. Various household survey results indicated, as Table 12 shows, that pensions together with agricultural incomes were less affected than wages (Milanovic, 1990, p. 6).

1.22 Up to 1980, the distribution of income in the country was quite equitable. This is mainly due to Hungary's pursuit of economic policy that has a strong commitment to social equity (World Bank, 1983). Between 1982 and 1987 the real personal income increased by 6.7 percent. Of this, 76 percent was due to increase in labor income and 26 percent due to the

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3. This was due to the change in the composition of pensioners with different pension levels. The "poor," namely the old pensioners (now mostly over 70 years old) who retired 10–15 years ago with very low pensions, experienced a substantial decline in real income during the inflationary period. Their numbers have declined however while a great number of new pensioners who recently retired, received significantly higher pensions.

increase in monetary social income.<sup>4</sup> The former was primarily the result of the spread of supplementary employment, particularly in the private sector, which provided relatively more earning opportunity to individuals at the upper income decile. In 1987, the lowest fifth of the income distribution received 10.9 percent of income and the top fifth 34.5 percent, in contrast to 11.3 percent and 32.3 percent respectively in 1982 (see Table 13).

1.23 The introduction of the personal income in 1986 tax slightly moderated the dispersion of income. Among the various income class category, it was the middle income group—those with incomes a little higher than the average—who experienced the greatest relative decline in their incomes.

1.24 Changes in the distribution of incomes are of course affected by differences in the incidence of various sources of income, transfers and taxes among the population. Earnings from the "second economy" accounted for almost one-fifth of the total gross personal income in 1989. While access to such income is fairly evenly distributed across income quintiles it appears to also be correlated to educational levels, usually providing those who are better educated and well-off with additional sources of income. Taxes on the other hand, are heavily concentrated on the top income decile, reflecting the progressive character of the personal income tax system. These taxes, however, apply to formal sector employment and do not apply to individuals who obtain income through secondary economy activities, where tax avoidance is rampant.

1.25 Any income difference among active households is therefore due to differences in the household structure, particularly in the number of active wage earners per household and the number of dependent children rather than on differences in earnings. The number of active earners per household is less than 1.5 for those at the lower 15 percent of the per capita income distribution; this figure is 1.75 for the population as a whole. The number of children in households belonging to the lower income decile is 3.5 compared to 2.2 in the top tenth. Any basis of income differentiation in the earnings differential is closely related to the level of education.

1.26 Milanovic 1990, argued that the recession in Hungary in the eighties did not change the functional distribution of income at the household level very much and the effects on size income distribution may in fact be negligible. This may be due to the fact that the share of capital income in total household income is much less. Hence any decline in income from ownership as profits and dividends (which is faster than wages) is not significant.

1.27 Moreover, the socialist recession was not accompanied by any significant increase in unemployment. The wage bill was reduced through uniform cuts in all wages. This was in part caused by government policies (including subsidization of loss-makers) designed to prevent increases in open unemployment. The two effects, namely the low share of capital income and

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4. The monetary social income is comprised of the payment of retirement benefits and family allowances ('Jövedelemeloszlás Magyarországon', "The distribution of incomes in Hungary," KSH, 1990).

## **II. ECONOMIC REFORMS AND ADJUSTMENT (1980-1990)**

2.1 The country's development process may be divided into three distinct phases namely: a. the central planning phase (1945-68); b. the period of decentralization under the new economic mechanism (1968-1978); and c. the stabilization phase (1979-1990). For our purposes, this section will focus on the last phase which is characterized by price adjustments, economic decentralization, and structural adjustment policies. A brief discussion on the main features of the new economic mechanism period is made to understand the economic factors leading to the country's economic crisis of 1978-82, and to establish Hungary's internal objectives for initiating reforms.

### **The New Economic Mechanism (NEM) Period (1968-78)**

2.2 The economic system in Hungary has evolved from the post-war period when planning was based on physical targets and central administrative directives. In 1968, substantive reforms were made to strengthen the influence of market forces on enterprise activities and to develop a system of "economic regulators" through which the State can indirectly guide overall economic activity.

2.3 A series of economic measures—the so-called new economic mechanism—was introduced to meet three broad objectives:

- a. Restoration of balance of payments equilibrium through restraint of domestic demand and recourse to external finance for both high-priority and quick-yielding projects.
- b. Structural transformation to make productive units more efficient and internationally competitive.
- c. Maintenance of living standards of the population.

2.4 These objectives were achieved mainly through the use of "economic regulators" including price measures, and trade, monetary and fiscal policies. Although enterprises were permitted to make their own decisions within the national plan, the state continued to influence their implementation of enterprise plans with the aid of other indirect "economic regulators" such as taxes and subsidies, interest rates control, selective credit, wage regulation, and exchange rate controls. State intervention and dominance was justified in order to ensure the fulfillment of international commitments; and to oversee the large state investments which between 1970 and 1980 represent 45 percent of all socialist sector investment.

2.5 The NEM also did not alter the state ownership of the means of production. It, however, abolished the system of physical economic planning. It also began to make use of profitability rates rather than physical output targets as a more important indicator of enterprise performance.

the absence of substantial increase in unemployment, suggest that the increase in poverty due to recession would be less than in other countries.

2.6 By 1973, the NEM had accomplished many of the important reform objectives for the first phase such as reducing the role of physical planning in enterprise decision-making and increasing the role of prices. Since Hungary is a highly trade-dependent economy and especially dependent on oil imports, it is unfavorably affected by a deterioration in the terms of trade. Various external shocks such as the oil price explosion of 1973 brought about serious economic repercussions. At the same time, Hungarian exports which mainly consisted of basic processed goods and agricultural products, began to face declining prices and demand in the world market.<sup>5</sup> The foreign trade situation was made worse by the relatively low technical standards causing industrial inefficiency. As a result, Hungary's material and energy import demands tend to be higher than in developed countries. These developments brought about a deficit of HUFF 2.25 billion in the trade balance of Hungary in the non-ruble relations in 1973.

2.7 This prompted the state to weaken the link between domestic and international prices and to reduce the role of prices in economic decisions, in an effort to insulate the Hungarian economy from unfavorable international economic trends. During this period, however, there was a substantial inflow of foreign capital.

### **Crisis Period (1978-82)**

2.8 Hungary's trade deficit peaked in 1978 with a \$1.2 billion deficit. The burden of foreign debt reached \$7.6 billion (46 percent of GNP), in contrast to only \$1.1 billion in 1970. At the same time, there was the second oil shock in 1979 and an increase in real interest rates in the early 1980's.

2.9 For Hungary, the first full crisis year was 1979 when its growth rate decelerated significantly. Since then it consistently failed to recover to levels it routinely reached during the 1970's. The squeeze in domestic demand resulted from a slow down in the growth of production and a decrease in resource transfers from abroad during the early 1980's. As a result, per capita consumption fell.

2.10 In 1978, the second oil price shock resulted in high net imports (HUFF 43 billion) which in turn led to a rapid increase in Hungarian national debt. The central economic administration responded to the growing external imbalance by putting special emphasis on the stability of the foreign trading exchange and the improvement of the foreign trading balance. Indeed, an improvement of the balance was achieved, but not through a positive rearrangement of exports and an increase in economic efficiency, but rather through reduction of home consumption, restriction of imports by administrative means and the forced increase of the volume of exports. This brought about an increase in the GDP rate and the reestablishment of the balance of foreign trade (KHS, 1989b).

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5. This accounted for more than 10 percent of the worsening terms of trade coefficient.

2.11 During the time of the worldwide economic shocks of the 1970's, Hungary was pursuing expansionary growth policies, despite the above mentioned stabilization attempts. This was done through extensive borrowing abroad. In 1984, an external financing crisis brought the strategy to a minimum. Macro-balances were restored but through cuts in investment.

### **Early Stabilization Attempts (1978-83)**

2.12 In late 1978, the Government reaffirmed its commitment to the structural economic reforms which had been initiated in 1968 but largely suspended since the early seventies. While the objectives of both external stabilization and structural adjustment were embraced simultaneously, stabilization remained the main preoccupation, at least through 1984.

2.13 In 1982, Hungary joined the World Bank. An IMF standby arrangement for \$525 million and a compensatory financing facility for \$80 million were approved by the IMF in December 1982. A second standby arrangement for \$425 million was approved in January 1984. The stabilization program was further strengthened after 1982 within the framework of two IMF standby arrangements, which were successfully implemented.

2.14 Some of the major reform measures undertaken between 1980-84 include:

- a. Control on domestic aggregate demand mainly by cuts in fixed investment.
- b. Restraint of convertible currency imports.
- c. Reforms in the institutional and legal infrastructure such as allowing the issuance of bonds by firms.
- d. Extension of free market pricing to about half of industrial output (excluding energy and food processing).
- e. Revision of the system of wage regulation to allow greater wage differentials and thereby more closely link rewards to performance.

2.15 The improvement of the external account and their ability to meet their debt servicing obligations restored the confidence of the international capital markets in Hungary, leading to an increasing availability of loans from commercial banks. Nevertheless, the emphasis on restriction of demand entailed costs in terms of GDP growth, which was only 1.8 percent per year on average between 1978-84, in contrast to 5 percent in the 1970s.

### **Expanded Reform Program (1985-87)**

2.16 There was a marked slowdown in Hungary in 1985. GDP fell by 0.5 percent, as against the 2.5 percent planned increase. The industrial sector growth declined by 0.8 percent, construction by 7.1 percent and agriculture by 5.3 percent (World Bank, 1986a). The convertible

currency current account changed from a \$330 million surplus in 1984 to a deficit in 1985 of \$458 million. This was largely due to a decline in exports. The unusually cold and long winter that year which caused energy shortages and input supply bottlenecks added more problems.

2.17 In 1986, Hungary obtained its first sectoral loan (SECAL) from the World Bank, amounting to 100 million. Two years later, the IMF granted its third stand-by arrangement and the World Bank granted its second industrial sector loan. These negotiations led to the expanded reform program implemented during 1986-90.

2.18 Priority in the 1986-90 Plan was given to increasing the competitiveness of the country's manufactured goods and reducing imports of energy and raw materials. To achieve these objectives, the following measures were strongly recommended by the World Bank:

- a. Allow greater freedom of entry and exit in industrial and trading operations.
- b. Liberalize foreign trade.
- c. Introduce a new self-management system which limits direct state intervention in enterprise decision-making.
- d. Revise the fiscal code to make taxation more predictable and to allow enterprises greater discretion in the use of profit.
- e. Institutionalize changes in the banking system.

During the latter half of the 1980's, Hungary implemented the following:

- a. A modern tax system, comprising personal income tax, VAT, and entrepreneurial profit tax (EPT).
- b. A two-tier banking system including the National Bank of Hungary and a full-service commercial banks.
- c. Legislation permitting limited liability associations, including joint stock companies and limited liability companies.
- d. Permission for private companies to employ up to 500 employees.

2.19 Between 1982 and 1987, GDP increased by 44.6 percent at current prices, or 7.7 percent in constant prices. This period may be divided into two phases in terms of domestic policies and economic trends. Between 1982 and 1984 maintaining the country's solvency became the central focus of economic policies. To achieve this objective, a set of restrictive measures was introduced in addition to the ones taken in the previous period. Domestic consumption declined and a drastic drop in accumulation took place. Finally, there was a decline

in the import of energy sources and of high technical level machinery from the non-ruble trading countries.

2.20 The period between 1985 and 1987 brought no significant positive changes either. This was indicated by a slight (1.3 percent) increase in GDP in 1986 which meant that production remained stagnant for the last two years. At the same time foreign exchange shortages continued to worsen. The worsening macroeconomic imbalances resulted in part from external factors such as declining terms of trade and successive droughts. But internal factors also contributed to the economic crisis. One was the premature relaxation of macroeconomic controls on aggregate demand such as loose fiscal and monetary policy and inordinate wage increases. Another was the persistence of fiscal imbalances stemming from the sizable budgetary subsidies and from other financial supports to inefficient firms. These supports, coupled with excessive credit availability, maintained a high level of domestic demand.

2.21 At the same time, long-term debt service ratios started rising from 37.2 percent in 1985 to nearly 40 percent in 1986. Likewise, the long-term debt to exports ratio increased from 110 to 120 during the same period (see Table 14). One principal shortcoming of the government during this period, from the viewpoint of the World Bank, was the inability to implement a sufficiently contractionary aggregate demand policy. By 1987, real household consumption, rather than declining by 0.5–1.0 percent as planned, grew by 2.8 percent. Investment also recorded stronger than planned growth.

### **Structural Adjustment Period (1988–91)**

2.22 The year 1987 marked the end of the period of gradual and moderate economic reforms. It soon became obvious that the solution to Hungary's declining economic performance required far more radical steps, as pressures intensified with the contraction and final demise of the inter-socialist bloc trade. In 1988, a system of personal income tax which approximated international practice was introduced, as well as a general circulation tax system. Consumption subsidies were substantially cut. By 1989, the Corporation Act was set in place making it possible for the ownership and organizational structure of enterprises to be transformed. Legal foundations for the involvement of both domestic and foreign capital were also put into place. The recognition of the existence of different forms of ownership and of enterprises meant a major step in the move towards a market economy.

2.23 Another important step was the liberalization of foreign trade, the financial sector and prices. The number of products with centrally determined prices was further reduced in 1990. Moreover, reduction in state subsidies to enterprises, combined with tight monetary policy, strengthened the financial position of Hungary.

2.24 Thus, in addition to the measures introduced in 1986–87 to stabilize the economy, the Hungarian Government elaborated a stabilization and economic reform program for 1988–90. A main element of this program was a tight aggregate demand policy. The main features of such reform program include:

- a. Promotion of exports through active exchange rate policy.
- b. Encouragement of savings through active interest rate policy.
- c. Tightening of short-term credits.
- d. Reduction of state financial support to enterprises in the form of direct and indirect subsidies; i.e. investment support, tax forgiveness, rescheduling etc.
- e. Reduction of subsidized credit schemes.
- f. Shifting of larger number of goods into the category of free-market prices.
- g. Lifting of non-tariff barriers such as the import licensing system and the global quota on consumer goods.

2.25 In 1990 and 1991, the first and second structural adjustment loans were granted by the World Bank. The objective was to promote privatization of state enterprise and the growth of new private ventures, including direct foreign investment. Some elements of the program include reform measures to:

- a. Tighten financial discipline.
- b. Reduce subsidies by as much as 4 percent of GDP.
- c. Restructure and liquidate insolvent enterprises and commercial banks.
- d. Increase the exposure of domestic industry to import competition to increase competition.
- e. Decontrol prices.
- f. Eliminate entry barriers to new private and small and medium enterprises.
- g. Establish unemployment insurance.

2.26 The second SAL was initiated in 1991 to support the acceleration of reforms initiated by SAL I. Specifically, the major goals of the program include:

- a. Decontrol of maize and fertilizer marketing and pricing.
- b. Privatization of all parastatals, except public utilities.
- c. Trade liberalization, involving tariff reform and removal of export constraints.

- d. Rapid expansion of the open general licensing system.
- e. Reform of civil service.
- f. Establish of market-clearing exchange rate.
- g. Positive interest rates.
- h. Lower fiscal deficit and monetary growth.

### **III. Meso-level Trends: Changes in Markets and Social Infrastructures**

3.1 As a result of the macroeconomic reforms undertaken by the Hungarian government, certain meso-level changes have taken place particularly in the labor and output markets as well as in the delivery and quality of social services such as health, education and housing. Since these changes have direct and indirect impacts on the welfare of low-income households, we will examine each of these market and social infrastructure changes in greater detail. The discussion in some of the sections is limited due to data constraints, however.

#### **Labor Force Participation and Employment Patterns**

3.2 The Hungarian labor force was estimated at 4.9 million, comprising about 45.5 percent of the population in 1989. The proportion of the economically active population to total population is 20 percent higher for males than it is for females. The proportion of the population who are active wage earners, has been declining—from 48.3 percent in 1970 to 45.5 percent in 1989—as a result of the aging characteristic of the population (see Table 15). Table 16 shows that the majority of the active wage earners (roughly 50 percent) belong to the 35–54 years of age cohort; this is true for both males and females. The latter also explains the negative growth rate of the labor force since 1980. In terms of geographical distribution, the proportion of active wage earners varies according to the type of township. It is highest in Budapest, somewhat lower in provincial towns and cities and lowest in villages. The reason for these differences is related to the different employment rates of women in various township categories (Social Report, 1990).

3.3 One striking feature of employment in Hungary is the high labor force participation rates of women and the contribution this has made to Hungary's labor force growth. This trend accompanies the pattern of a declining proportion of female dependents, particularly among women of working age. The female crude activity ratio was 40.7 percent in 1987, compared to 51.3 percent for men. Although rising female participation rates is typical of western European countries, this phenomenon is more pronounced in the eastern European countries (World Bank, 1991f, p. 3). One of the main reasons for this pattern is the nature of social policy that promotes generous maternity leaves, child care and family allowance benefits for working women. This aspect of the social policy is bound to change, however, as the transition to the market economy is underway. These changes will have serious implications on women and their families.

3.4 The sectoral pattern of employment has followed the evolution of the sectoral shares of GDP. Hungary embarked upon a rapid industrialization beginning in the 1950s. As a result, the shares of industry rose from 22 percent in 1949 to 41 percent in 1987. Likewise, the service sector grew from 24 percent in 1949 to 40 percent in 1987. The proportion of those employed in agriculture, however, has been declining gradually, from 54 percent to 19 percent during the same period (see Table 16).

3.5 The employment structure of men and women is widely different. A greater proportion of male active wage earners tend to work in material branches (mainly in industry, building industry and transport). This sector of the economy however has been experiencing relatively slow and even stagnant rate of growth during the eighties. Commerce is one branch

where there has been a positive growth in employment during the same period. It is also this sector of the material branches where there is a high concentration of female workers. Hence the net effect on the overall employment of women is slightly more positive since any decline in the labor demand of industry has been partly compensated by the moderate employment growth in commerce and partly by the expansion of the non-material branches.

3.6 The employment growth of the non-material branches during this period is largely a result of the expansion of health, social and cultural services. Because of the labor-intensive character of these activities, there is a strong correlation between the growth of the sector and the increased demand for qualified teachers and medical workers. These fields have been dominated by women. In fact, the sex ratio of those working in the non-material branches is 2:1 in favor of women. This may explain why unemployment in Hungary seems to have a greater impact on the male labor force than on the female labor force.

3.7 The composition of female wage-earners in terms of age distribution is quite similar to that of the male as shown in Table 17. The proportion of women between 35 and 54, however, is slightly higher than that of men belonging to the same age cohort. This is due because the active working period for women is five years shorter than that of men. Women expected to retire at 55, while for men the retirement age is 60.

3.8 Educational status is often used as a proxy for the skill levels of the labor force. Table 18 presents the distribution of male and female wage earners by educational level. Between 1982 and 1987, there has been a slight improvement in the skill level of the labor force as indicated by the increased proportion of male and female labor force members who have completed secondary and tertiary levels of education. Comparing the average educational attainment of the male and female wage earners, 57 percent of women have at least gone to the secondary level of education while that of the men, it is 63.3 percent.

3.9 The relatively high educational status of the Hungarian labor force partly explains the dominance of skilled and mental workers<sup>6</sup> in the composition of wage earners (see Table 19). Although the sex distribution of the labor force reflects the general tendency of female physical workers to occupy more of the semi-skilled and unskilled occupations, it is interesting to note that female mental workers represent 47 percent of the total female wage earners, compared to that of the men (24.5 percent of total male wage earners). In terms of the top ranking positions, however, men continue to dominate the managerial and executive ranks.

### **Unemployment**

3.10 Unemployment began to appear in the Hungarian economy around the middle of the 1980's and increased rapidly as a consequence of the supply and demand relations of the labor

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6. Mental workers are defined to include managers, executives, top level experts, other specialists and office workers (KSH The Level Earnings, 1986 and 1991).

market.<sup>7</sup> Officially, however, the phenomenon of unemployment has only existed since 1989. This official acknowledgement took the form of the provision of unemployment compensation benefits and temporary allowance which was provided by the State.

3.11 The majority of the unemployed in Hungary, as of September 1991, are male (see Table 20). This is true for most occupational groups particularly that of the skilled, physical worker category. The majority of the female unemployed belong to the semi-skilled and unskilled worker category.

3.12 Unemployment therefore seems to affect mainly the physical workers who represent more than 80 percent of the unemployed. The unemployed physical workers comprised 88 percent of the male unemployed and 70 percent of the female unemployed. Further compounding the problem, the number of vacancies registered with employment agencies is extremely low. On average, there are 5 vacant jobs for every 100 unemployed persons.

3.13 The probability of finding work varied widely across the various occupational groups. The majority of the unemployed at the unskilled and office category have the greatest difficulty in finding work compared to their semi-skilled, skilled and mental work counterparts. There are only 3 vacancies offered for every 100 unemployed unskilled worker while for every 100 office workers it is only 1.

3.14 The rate of unemployment is unevenly distributed across the geographical regions. It is highest in Szabolcs-Szatmár-Bereg county (12.6 percent) and lowest in Budapest (1.8 percent). Moreover, unemployment seems to be worse in the poorer areas of the country. The workers in these regions have been characterized as "commuter-types", i.e. male wage-earners, usually semi-skilled and skilled workers, commute from these parts of the country to their work in the capital city and other major towns and cities. Women, on the other hand, work as 'assistant family members' in agriculture because of the limited employment opportunities in the area and because of household chores and childcare responsibilities that inhibit them from seeking work outside their immediate vicinity. These women are not defined as unemployed by the methodology adopted by the Labor Information Center (Munkaügyi Információ Központ) to determine the number of registered unemployed.

3.15 Unemployment is a distinctly age-related phenomenon. It mainly affects people either in the beginning of their careers (17-25 years of age) or in the age group 36 and 55 years (see

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7. Data concerning unemployed people who are registered as such or are receiving unemployment benefits is published monthly by the Labor Information Center (Munkaügyi Információs Központ). At present, there is no information regarding the 'hidden' unemployed who are not included in the registers. After January 1991, the KSH (Central Statistics Office) will be carrying out a questionnaire survey on a quarterly basis on a sample of 30,000 households. The survey resembles the labor-force surveys adopted in the United States and follows the internationally accepted methodology in surveys and measurements. This should help the Hungarian labor force and employment statistics to be comparable with those of other countries. At the same time it will provide the necessary information on the employed, the underemployed, the 'discouraged' and the unregistered unemployed as well as information concerning the living conditions of the families of the unemployed. The questionnaire also inquires whether the person in question is registered as unemployed and whether he/she is receiving any unemployment benefits.

Table 21). The older age cohort is most seriously affected by unemployment. These persons are too young to make use of the retirement option, and at the same time, the employers usually don't find it worthwhile to invest in their retraining even if the employee is willing to participate in the retraining programs.

3.16 In sum, there are three groups that are particularly vulnerable to job losses. Firstly, there are the new entrants to the labor market. The prospects for persons attempting to get their first job may be expected to be low during periods of adjustment and economic transformation. This is more so for those with a low level of education and training.

3.17 Secondly, older workers made redundant during economic restructuring may find it hard to find new jobs. The experience of various OECD countries has been that the probability of leaving unemployment declines with age, leading to longer durations of unemployment and a concentration of the elderly among the long-term unemployed.

3.18 Thirdly, there will be those who suffer from recurrent unemployment, there is no reason to believe that the usual pattern in Hungary will be a single spell of unemployment followed by several years of stable employment.

### **Changes in Wage Earnings**

3.19 Until 1991, wages in Hungary were assumed to be exogenously determined, given the use of incentive-based systems. A study by Commander and Staehr shows, however, that wages in Hungary are strongly associated with prices and less strongly associated with productivity. They argued that this pattern of wage determination reflected the inefficiencies in the labor market. Such problems can be traced to the absence of market-based discipline and the weights given to full employment, price stability and low-income dispersion (Commander 1991, p. 1). Moreover, there were regulations placed on the range in which wages can fluctuate.

3.20 During the seventies, these wage and income regulations had four major objectives:

- a. To control growth in the purchasing power to maintain the planned macro balance.
- b. To keep earnings differentials within socially acceptable bounds.
- c. To maintain living standards and.
- d. To increase productivity (World Bank, 1983 p. ix).

3.21 There have been frequent changes since then on the complex system of wage and income regulations. In 1979, changes in wage regulations began to emphasize the stimulation of productivity and the control of consumption levels. This had a significant effect on the income

levels since labor income accounted for about two-thirds of the total recorded income of the population.

3.22 Table 22 presents the monthly basic wages for each of the occupational groupings. The wage ratio between the lowest paid unskilled worker and the highest paid top executives is only 1:4. Various compensation, profit premia and other fringe benefits account for an additional 40 percent of the salary received by the workers. Taking the average income which takes these benefits into account, the ratio slightly increased to 1:4.4.

3.23 On average, female wage earnings tend to be lower than that of the male. One reason is that women tend to occupy the lower paid positions among the occupational groupings. There is also some evidence that gender-based wage differential exists between the male and female workers belonging to the same occupational group and in positions requiring the same skills. In the case of teachers, there seems to be a 20–22 percent wage disadvantage for females. Among those employed in livestock-raising and plant cultivation, a 16 percent wage disadvantage applies to female wage earnings compared to their male counterparts (KSH, 1991b).

3.24 The earnings differential and composition of workers by occupational groupings is also influenced by the type of township in which the worker resides. The composition of wage earners residing in Budapest and the other cities and towns is largely different from those living in the villages. This difference seems to hold both for female and male active wage earners although the type of the township seems to have more influence on the earnings of men than of women. The proportion of white collar workers (mainly top managers and top level specialists) is higher in the capital city and in other cities and towns than in villages while the reverse is true for physical workers. This difference can be explained by the more significant administrative and cultural activities in the cities and towns. The difference between male and female wages is lower in Budapest than the national average. The wage disadvantage of women is 21 percent for all types of jobs; in managerial positions the wage differential is slightly lower than 17 percent.

## **Labor Market Regulations**

### **Employment and wage regulations**

3.25 Hungary used to set employment limits on certain enterprises and industries. It imposed these selective controls on employment between 1976 and 1981, classifying enterprise by employment regimes. Some enterprises could increase employment but others were forced to keep employment unchanged or reduce it—or even to assign workers to priority enterprises (Vodopivec, 1990, p. 12).

3.26 Economic competitiveness and investments in human capital depend crucially on the flexibility of wages in response to changes in the supply of and demand for labor. It is also dependent upon a wage structure that is responsive to skill and educational requirements and to changes in productivity levels.

3.27 The previous rigid system for wage determination hindered the achievement of these objectives. The old system relied on countrywide determination of the basic wage rate (by skill exertion matrices) and value-added or gross output to calculate an enterprise's performance index. This index was then used to determine the "socially appropriate" level of the wage bill following meticulous rules on how to calculate the wage bill or the profit-sharing component of wages. Such schemes allowed for automatic yearly increases in the wage bill, regardless of the level of performance. It also accommodated the average "wage breaks" in the form of the percentage increases in the wage bill—above which the enterprises face high marginal tax rates (Vodopivec, 1990, p. 14).

3.28 Furthermore, Hungarian enterprises were granted a special tax-free allowance for cuts in employment. The government determined minimum and maximum wages—referred to as the wage brackets—for each occupational group. Enterprise management was allowed some leeway to set wages within these brackets for individual employees. This resulted in an inflexible system with a compressed wage structure.

3.29 What is also striking is the narrow range of wage differentials among enterprises. A highly progressive tax actually prohibits any wage increases above a certain low threshold (historically 6 percent a year) and "needy" enterprises are generously subsidized. As a consequence, the profit-sharing part of wages has been kept low—to about 4 percent in the early 1980's.

### **Unemployment compensation**

3.30 Hungary has a basic system of unemployment compensation and proactive labor market programs (retraining, wage subsidies, start-up loans, job-creating investment, public works employment, employment services, etc.). As of September 1990, one-third of the registered unemployed received neither the basic unemployment benefit nor the extended allowance (see Table 23). Some of the non-recipients, however were involved in the proactive labor market programs. The low number of persons receiving temporary allowances suggests that expiry of entitlement was not a significant problem in 1990. This situation will almost change, however, as the level of unemployment rises, leading to longer durations and increased frequency of unemployment spells.

3.31 In 1991, a major reform of the unemployment support system has been introduced as part of the 1991 new employment law (see Table 24a and 24b). The duration of unemployment insurance was substantially shortened from 18 to 12 months. Moreover, the benefit rates were reduced while the so-called temporary allowance was eliminated.

### **Changes in the Prices of Consumer Goods**

3.32 One of the main components of the structural adjustment program has been the liberalization of both product and factor prices. At the end of 1990, almost 90 percent of consumer and product prices were free of government control. Price controls remained however,

in effect mostly for public utilities (e.g. railway tariffs, basic post and telephones, drinking water and sewerage, and household energy). In addition, Hungary has significantly reduced consumer subsidies in the past few years (see Table 25). In 1990, the subsidies were reduced from over 13 percent of GDP in 1989 to about 10 percent. The largest so-called consumption subsidy is for pre-1989 housing loans, which was equivalent to 3.7 percent of GDP in 1989.

3.33 The average annual growth of consumer prices between 1981 and 1987 was 5.9 percent and over the whole period their growth was 42.2 percent. Inflation accelerated after this period and between 1987 and 1990, prices rose by 74 percent. The situation was made worse by the fact that after 1987/88, price increases mainly affected the most important consumer articles such as food, clothing as well as services and household energy sources (see Table 26). Since price increases affected different articles and services, their impact on the household expenditure pattern would vary by type of household. Since pensioners comprise the majority of the households under poverty line, we shall examine how their expenditure pattern was affected by the change in prices.

3.34 There are several household characteristics that need to be taken into account when examining the situation of retired families. In comparison with active households, it must be born in mind that most pensioners' households consist mainly of adults whose demands are higher than those of young children. The majority of active households, on the other hand, consist of children and adults. Active households tend to have more active wage earners and thus the burden of home maintenance is more evenly divided between household members.

3.35 Between 1982 and 1987, investment expenditures such as purchases or construction of homes dropped by 50 percent in the case of pensioners' households and by 25 percent in the case of active households (calculated at a constant price). At the same time, there was a rise in the purchase of durable consumer goods. Its proportion of total household expenditure rose from 9.5 percent to 10.5 percent in active households and from 4.3 percent to 5.4 percent in the case of pensioners.

3.36 Although the proportion of spending on current consumption remained the same for active households, there are some changes in its composition. One important difference is the increase in the maintenance of homes (from 12.4 percent to 14.6 percent). The proportion of clothing expenses continued to decline (from 10.3 percent to 9.0 percent) and so did the proportion of spending on articles of pleasure—alcohol, tobacco (from 7.7 percent to 6.6 percent) and, to a slight extent, on food as well (from 30.1 percent to 29.8 percent).

3.37 The changes in the expenditure pattern of pensioners' households is similar to that of the active households. The proportion of home maintenance costs increased from 15.6 percent to 17.1 percent and there was a significant rise in the proportion of consumer durable. The proportion of food expenses decreased to some extent (from 40.4 percent to 39.8 percent). There was a more substantial decline in the rate of spending on articles of pleasure (from 8.8 percent to 7.4 percent) and on clothing (from 6.8 percent to 6.0 percent). The consumption pattern of

pensioners remains to be dominated by basic expenses, such as food, clothing, and home maintenance which account for 63 percent of their total expenditures.

### **Changes in the Level and Composition of Public Expenditure**

3.38 In relative size and scope, Hungary's public expenditures on social services resembles that of the 'social welfare' states such as Belgium, Denmark, Finland, Norway, Netherlands and Sweden. It roughly amounts to about one-third of GDP, or half of the total household disposable income.

3.39 Despite the relative dominance of government activity in the economy, Hungary's social expenditures (excluding transport) seems to be well below that of the European social welfare countries particularly in terms of education, health and unemployment benefits. Looking at the various components of social expenditures, however, it seems that all categories of social payments grew significantly relative to GDP, with the exception of sick pay and maternity benefits. The following sections examine more closely at the provision of three important social services namely, health, education and housing.

#### **Health**

3.40 Most of the increase in total health expenditure during the period 1981-89 is attributable to the growth in the average real benefits per capita. In 1986, total health expenditure represented 5.1 percent of GDP, 80 percent of which is provided by the State (see Figure 2).

3.41 Health care and pharmaceuticals, which are financed predominantly by the Social Security Fund, account for 14 percent of total social expenditures. There are few incentives for consumers to use health care resources efficiently, or for health care providers to make services more cost-effective. In 1991, steps were taken to reduce the inefficiencies in use of health care services. The health and pharmaceutical expenditures of the social security fund is expected to be separated into a National Health Insurance Fund (NHIF) in 1992.

#### **Education**

3.42 Total education expenditure represented about 5 percent of GDP for the period 1985-87 (see Table 27). Its growth rate of 3.65 percent in 1986 is mainly attributed to the expansion of secondary education. In fact, primary education expenditures declined during the same period. Since 1989 state subsidies (for recurrent expenditure) declined at the rate of 2.1 percent. Expenditures of investment, however, continued to increase.

3.43 Education is compulsory in Hungary through primary school (grade 8) until the age 16. About 95 percent of the pupils continue into one of the following after completing primary: a. academic secondary schools; b. vocational secondary schools which offer occupationally specific as well as general education; or c. apprentice schools which offer very specialized job training in conjunction with enterprises.

3.44 The educational level of the population has improved overall with the expansion of the school system in last two decades. In addition, there was improvement in the quality of technical, educational, economical and commercial training at the secondary and tertiary levels. As a result, there was a considerable increase in the enrollment at the secondary and tertiary levels despite the decline in population (see Table 28).

3.45 The proportion of women studying at colleges has been rising. The increase in the average schooling years of women provided them with more opportunity to enter in certain professional fields, although these tend to be at the lower-paying ranks. In recent years, however, both the economic recession and efforts to reduce the number of bureaucratic workers have made it particularly difficult for women with a simple secondary school education and no special qualification to get any job. The employment prospects of the unemployed are the least encouraging.

3.46 The 1984 microcensus data reveals that the majority of graduates were qualified in the fields of education, science and academic studies and public education (35.5 percent). Another 28.1 percent were qualified in the fields of technology and engineering, 9.6 percent in agriculture and 8.8 percent in economics. Between 1980 and 1984 the proportion of graduates among active wage-earners increased by 18 percent, but this increase was unevenly distributed. Those engaged in commerce had the highest employment growth, followed by economists, teachers and engineers.

3.47 Educational level seems to have a positive effect on earnings, although it appears that these wage differences are not very large. Men with a university degree earn almost twice as much as those who have not completed at least an 8 year primary education. In the case of women, this difference is approximately 80 percent. The average difference between male and female wages is 24 percent (in favor of men), and this figure is similar on all levels of education (KSH, 1991b).

3.48 Apart from the level of education, earnings are also influenced by the nature of the work (manual or mental) and by the position occupied on the positional hierarchy (manager, lower manager, subordinate). The following trends apply to the 4 million wage earners employed outside cooperative agriculture. Between 1982 and 1987, the proportion of top managers, middle managers and top level professional experts among female wage earners increased and so did the proportion of skilled workers among female physical workers. These trends are due to the increased proportion of women with a higher level of education. The characteristic gender still hold, however. For instance, 45 percent of the men and more than half of women work as physical workers. But the majority of men are skilled while that of the women are semi-skilled workers. Furthermore, one-quarter of male wage earners and almost half of women are mental workers but 60 percent of women employed as white collar workers are only middle and low level experts of office workers (e.g. typists) while majority of the managers and executives tend to be men.

## Housing

3.49 The Hungarian housing sector is presently characterized by a very high level of subsidy and the perception of a high and increasing level of shortage. This current situation is a sharp contrast from the past trends as depicted in Figure 3. On a per capita basis, Hungary was one of the world's leading housing producers, particularly for the period 1970-84. The data in Table 29 provide additional evidence of Hungary's high level of investment in housing. The share of the housing stock with various amenities, and the share supplied with gas more than doubled in this period (World Bank, 1991a). This has been one of the most rapid improvements in the housing stock of a country in a 15 year period.<sup>8</sup> Moreover, it appears that by 1986 Hungary has increased the average dwelling size to 74 square meters, a figure that far exceeded the size of the largest unit in other former East European countries.

3.50 Given these data on the significant improvements in the housing stock, the question that arises is why there seems to be a perception of shortage amidst plenty. The answer lies at the price distortions in the housing market. This is particularly true for the rental sector which is heavily dominated by the approximately 800,000 state rental units of which about half of the rental sector is concentrated in Budapest—the only city in which most households rent.

3.51 Subsidies in the housing sector are large, mismeasured and misunderstood. One of the biggest subsidies to the sector, i.e. the difference between the administered rent and the market-determined rent, is included only partially and indirectly in government budgets (see Table 30). The rent level was equal to 2 percent of income in 1987 (World Bank, 1991a). The price mechanism has not been used to direct the allocation of state-owned units to those who are willing to pay for and maintain them. Consequently, most households face very large distortions in choosing where and what type of unit to live in.

3.52 In Budapest, over 50 percent of the housing stock and a greater share of the central city stock is public housing. But over 30 percent of this stock is over 60 years old and another 25 percent is over 35 years old (World Bank, 1991a). Most of the units are in need of major renovation. The poor condition of many state rental units is another hallmark of the system. Until the early 1980s, the state budget did not provide assistance for maintaining the units. As a result, there was systematic depreciation of the housing stock.

3.53 There seems to be no apparent major differences between the poor and the average households in the type of tenure and size of housing, at least by US or other OECD countries standard. Nonetheless, most rental housing subsidies go to households in the upper half of the income distribution. Table 31 shows the distribution of households by occupation categories between renters and owners. The data show that those in the highest paid occupational groupings namely, managers, intellectuals and white collar workers, are not only renters but also occupants

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8. Moreover, when the figures are compared with those of the OECD economies with much higher income levels, such as Japan, Austria and France, the share of the Hungarian housing stock with the amenities is relatively high.

of the larger units. As a result, the situation of the poor who have relatively large families is worse compared to the average household in terms of density.

3.54 Moreover, there is a distinctive difference in the quality of housing units between the two household categories. Poor households have far fewer units equipped with water, bathroom or central heating. The fewest amenities exist in the homes of inactive households, almost half who have no running water and two-thirds who have only traditional heating (see Table 32).

3.55 Earlier studies also provide similar conclusions. A study in 1984 found that no major difference between the rental and nonrental sectors in the occupational distribution; although retired and white collar households are more likely to rent and agricultural workers to own. This pattern also reflects the prevalence of State rental housing in urban areas. Within the rental sector, however, the inequalities are more striking. Renter households have the highest housing density, while the share of housing units "without amenities" is higher than the average in households of semi-skilled, unskilled agricultural and retired workers.

3.56 Under the current market reforms being undertaken by the Hungarian government, it seems that the provision and maintenance of adequate housing will primarily be a matter for the private sector. The steps towards privatization are underway now that the Government's role in this sector has diminished. But as local governments raise rents on state-owned flats to market levels, some individuals may not be able to afford the high rates. In 1992, the Government encouraged local self-government bodies to develop their own housing/programs to provide a safety net for the poor.

### **Conclusion**

3.57 The preceding discussion illustrates the likely effects of public expenditure cuts on the poor. The rise in unemployment, accelerated inflation particularly on the prices of food, heating, energy sources and social services alongside with the anticipated decline in state transfers and state subsidies are bound to have serious repercussions on the welfare of the population as a whole and on low-income households in particular. The development of an appropriate social policy to protect the most vulnerable groups during the period of structural adjustment becomes an imperative task.

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## **ANNEX A: Tables and Figures**

Table 1 Selected Demographic Parameters, 1982-87

Year	Number of population (thousands)	Natural increase or decrease (percent)	Rate of live birth (percent)	Death Rates (per thousand)	
				Men	Women
1982	10,711	-1.0	12.5	14.7	12.3
1983	10,700	-2.0	11.9	15.2	12.7
1984	10,689	-2.0	11.8	15.2	12.6
1985	10,657	-1.6	12.2	15.2	12.4
1986	10,640	-1.8	12.1	15.0	12.7
1987	10,621	-1.6	11.9	14.6	12.3

Source: Andorka, Kolosi, Vukovich: Társadalmi report 1990, (Social Report 1990) and *Statistical Évkönyv* (Statistical Annual) vols. 1982-88.

TABLE 2

POPULATION BY SEX AND AGE GROUP  
(January 1988)

AGE GROUP	MALE	FEMALE	TOTAL
0-4	318,823	305,369	624,192
5-9	378,915	360,083	738,998
10-14	446,976	423,092	870,068
15-19	378,946	357,375	736,321
20-24	338,591	318,730	657,321
25-29	345,307	332,579	677,886
30-34	457,472	443,593	901,065
35-39	410,319	407,204	817,523
40-44	351,449	354,923	706,372
45-49	318,071	341,892	659,963
50-54	287,980	327,903	615,883
55-59	292,574	340,302	632,876
60-64	265,412	331,577	596,989
65-69	199,774	280,181	479,955
70-74	126,392	191,703	318,095
75-79	118,370	199,559	317,929
80-84	55,202	109,406	164,608
85-89	20,576	47,810	68,386
90-	5,115	14,815	19,930
Total	5,116,264	5,488,096	10,604,360

Source: Central Statistical Office

Source: World Bank (1991) No. 9183 - HU.

**Hungary**

TABLE 3

Mid-1989 Population (mn) 10.6  
1989 Per Capita GNP in US\$

10.6  
2,580 (Atlas Methodology)

National Accounts	Share of Gross Domestic Product (from current price data)						Growth Rate (% per year) (from constant price data)				
	1965	1973	1980	1988	1989	1990	1965-73	1973-80	1980-88	1988	1989
Gross Domestic Product (mp)	100.0	100.0	100.0	100.0	100.0	100.0	6.3	4.0	1.8	0.1	-0.2
Net Indirect Taxes	..	..	10.5	13.9	14.1	16.1	..	..	..	..	..
Agriculture	18.5	19.2	17.1	14.9	13.9	13.0	3.9	2.3	2.9	4.6	-1.9
Industry	56.3	46.7	41.2	37.4	36.0	32.4	6.8	5.2	1.3	-2.2	-2.6
(of which Manufacturing)	..	..	..	..	..	..	..	..	..	..	..
Services	25.2	34.1	31.2	33.8	36.0	38.5	7.3	3.8	2.6	2.7	2.8
Resource Balance	-0.7	4.6	-2.2	2.7	3.3	3.7	..	..	..	..	..
Exports (G+NFS)	..	38.2	39.1	37.6	35.9	32.0	6.0	4.5	6.0	0.9	-7.2
Imports (G+NFS)	..	33.6	41.2	34.9	32.6	28.3	5.9	1.7	-0.4	0.9	-1.1
Total Expenditures	100.7	95.4	102.2	97.3	95.9	96.3	6.4	4.0	6.6	-2.9	-0.3
Total Consumption	75.2	65.8	71.5	71.8	70.0	72.4	5.1	3.6	7.3	-3.9	-0.7
Private Consumption	..	56.3	61.2	60.6	59.3	61.5	..	3.4	7.4	-5.1	0.4
General Government	..	9.4	10.3	11.2	10.7	10.9	..	5.1	6.9	3.3	-6.8
Gross Domestic Investment	25.5	29.7	30.7	25.5	25.9	23.9	7.4	5.2	5.0	-3.3	0.9
Fixed Investment	22.8	28.7	28.8	21.0	20.1	17.7	8.5	4.7	4.9	-8.3	4.3
Changes in Stocks	2.7	0.9	1.9	4.5	5.8	6.2	..	..	..	..	-8.7
Gross Domestic Saving	24.8	34.2	28.5	28.2	30.0	27.6	..	1.6	5.9	10.1	0.9
Net Factor Income	..	..	-1.8	-3.8	-4.2	-3.3	..	26.8	-18.4	3.2	..
Net Current Transfers	..	0.8	0.2	0.4	0.4	2.2	..	-14.2	8.1	4.0	..
Gross National Saving	..	35.1	27.0	24.8	26.2	26.5	..	14.9	4.7	11.0	..

Source: World Bank, Trends in Developing Economies, 1991.

**Table 4. Sectoral Distribution of GDP 1982-87,  
(at constant 1981 prices, in billion HUFF)**

Sector distribution by Industry	1982	1983 <sup>a</sup>	1984	1985	1986	1987
<b>Industry (Manufacturing)</b>	274,128	279,060	286,154	280,202	278,867	287,890
<b>Building (Construction)</b>	53,695	55,202	52,307	49,885	49,914	53,815
<b>Agriculture and Forestry</b>	151,830	151,948	158,969	152,521	157,521	153,117
<b>Transport, Post and Telecommunications</b>	64,594	64,819	66,370	66,117	68,010	71,045
<b>Commerce</b>	66,183	67,701	67,475	69,900	71,279	75,244
<b>Water Economy</b>	9,870	10,131	10,287	10,340	10,773	11,130
<b>Total of Material Branches</b>	625,706	635,404	649,308	637,176	646,022	663,431
<b>Personal and Economic Services</b>	29,035	30,447	31,332	33,772	35,335	38,923
<b>Health, Social, and Cultural Services</b>	43,207	43,148	44,460	45,761	46,897	48,845
<b>Public Admin. and Other Services</b>	28,157	28,558	31,178	31,862	32,325	33,520
<b>Sub-Total of Non- material Branches</b>	100,399	102,153	106,690	111,395	114,557	121,188
<b>All Branches</b>	726,105	737,557	756,278	748,571	760,579	784,719
<b>Taxes on Commodities and Price Differences</b>	68,400	62,692	65,242	70,870	71,440	81,007
<b>Gross Domestic Product</b>	794,505	800,249	821,520	819,441	832,019	865,726

**Table 5. Sectoral Distribution of GDP, By use 1982-87**

Utilization	1982	1983 <sup>a</sup>	1984	1985	1986	1987
Household Consumption	485,771	488,337	494,134	500,788	510,764	530,025
Consumption of the Community as a Whole	80,396	80,603	81,585	84,965	88,921	89,232
<b>Total Consumption</b>	<b>566,167</b>	<b>568,940</b>	<b>575,719</b>	<b>585,753</b>	<b>599,685</b>	<b>619,257</b>
Investments	191,788	207,414	203,422	177,862	214,058	202,814
Incompleted Investments	11,633	-10,987	-141,233	5,560	-18,723	11,743
<b>Total Investments</b>	<b>203,421</b>	<b>196,427</b>	<b>189,189</b>	<b>183,422</b>	<b>195,355</b>	<b>214,557</b>
Change in Stocks	10,290	1,563	4,040	3,090	7,246	-5,560
<b>Gross Capital Formation</b>	<b>213,711</b>	<b>197,990</b>	<b>193,229</b>	<b>186,512</b>	<b>202,581</b>	<b>208,997</b>
<b>Total Domestic Utilization</b>	<b>779,878</b>	<b>766,930</b>	<b>768,948</b>	<b>772,265</b>	<b>802,265</b>	<b>828,254</b>
Exports	319,133	340,415	363,001	381,906	373,406	391,114
Imports	304,506	307,096	310,409	334,730	343,653	353,668
<b>Trade Balance</b>	<b>14,627</b>	<b>33,319</b>	<b>52,572</b>	<b>47,176</b>	<b>29,753</b>	<b>37,472</b>
<b>Gross Domestic Product</b>	<b>794,505</b>	<b>800,249</b>	<b>821,520</b>	<b>819,441</b>	<b>832,019</b>	<b>865,726</b>

Source: Népgazdasági Mérlegek 1949-87 (KSH,1989).

Table 6: Proportion of GDP Produced by the Population and the Private Sector Branches of the Economy, 1982-87  
(in Percent of GDP)

Branch Type	Complimentary Activity of Population		Private Sector <sup>a</sup>		Complimentary Activity of the Private Sector	
	1982	1987	1982	1987	1982	1987
Manufacturing	0.1	2.6	3.2	3.7	3.3	6.3
Construction	3.7	4.3	15.8	24.2	19.5	28.5
Agriculture and Forestry	28.9	28.5	0.9	0.8	29.8	29.3
Transport	—	0.8	1.9	9.8	1.9	10.6
Commerce	2.4	3.0	2.7	6.4	5.1	9.4
Water	—	1.1	—	0.3	—	1.4
Other Materials Services	—	1.8	1.9	10.6	1.9	12.4
Material Branches (Avg.)	7.6	8.7	3.5	5.6	11.1	14.3
Non-Material (Avg.)	10.1	11.5	2.6	4.3	12.7	15.8
All Branches (Avg.)	7.9	9.1	3.4	5.5	11.3	14.6

a. GMK = independent units of the private sector.

Source: Main Economic Processes, 1979-1987.

Table 7: Composition and Income Status of Households, by Types of Townships, 1982 and 1987

Type of Township	Average size of household	Monthly Average Earnings (HUFF)	Monthly Average Wage Income (HUFF)	Wage Earners <sup>a</sup> (active)	Wage Earners <sup>a</sup> (inactive)	Dependents <sup>a</sup> (under 15)	Dependents <sup>a</sup> (other)
<b>1982</b>							
Budapest	2.52	5,520	3,806	120	73	51	14
Provincial towns and cities	2.89	4,831	3,334	137	58	69	24
Villages	3.03	4,371	3,254	134	66	67	36
National Average	2.89	4,757	3,385	132	65	64	27
<b>1987</b>							
Budapest	2.45	8,481	5,990	112	71	47	16
Provincial Towns and Cities	2.82	7,251	5,250	134	61	63	24
Villages	2.93	6,291	4,961	130	73	60	31
National Average	2.79	7,082	5,262	128	68	58	25

a. Figures are per 100 households.

Source: A családi jövedelmek színvonala és szóródása 1982-ben /The Level and Spread of Family Incomes in 1982/ (KSH 1986); Jövedelemeloszlás Magyarországon /Income Distribution in Hungary (KSH 1990).

TABLE 8: Selected Social Indicators, 1979-90.

	Unit of measure	25-30 years ago	15-20 years ago	Most recent estimate (mre)	Same region / income group			Next higher income group			
					Europe, Middle East, North Africa	Upper-middle-income					
<b>HUMAN RESOURCES</b>											
<b>Determinants of population growth</b>											
Fertility											
Crude birth rate	per thou. pop.	13.1	18.4	11.7	31.8	25.5		13.7			
Total fertility rate	births per woman	1.81	2.38	1.75	4.29	3.27		1.78			
Contraceptive prevalence	% of women 15-49	..	..	73.0	..	..		..			
Child (0-4) / woman (15-49) ratios											
Urban	per 100 women	..	27	23	..	..		..			
Rural		..	33	28	..	..		..			
Mortality											
Crude death rate	per thou. pop.	10.6	12.4	13.3	10.2	8.0		8.9			
Infant mortality rate	per thou. live births	38.8	32.8	15.8	63.9	45.2		8.9			
Under 5 mortality rate		..	..	18.1	63.5	54.4		17.8			
Life expectancy at birth: overall female	years	69.5	69.8	70.5	63.8	67.4		76.3			
		72.0	73.0	74.3	66.0	69.9		79.6			
<b>Labor force (15-64)</b>											
Total labor force	thousands	5,138	5,445	5,264	197,229	159,186		368,427			
Agriculture	% of labor force	31.7	21.7	..	..	..		..			
Industry		39.8	44.2	..	..	..		..			
Female		..	37.9	42.0	44.8	26.5	30.7	37.8			
Females per 100 males											
Urban	number	..	104	106	..	..		..			
Rural		..	105	100	..	..		..			
Participation rate: overall female	% of labor force	50.6	51.7	49.4	38.8	38.7		47.5			
		37.1	42.2	42.8	20.6	23.5		35.1			
<b>Educational attainment of labor force</b>											
School years completed: overall male	years	..	..	..	..	..		..			
		..	..	..	..	..		..			
<b>NATURAL RESOURCES</b>											
Area	thou. sq. km	93	93	93	14,738	16,264		33,808			
Density	pop. per sq. km	109	113	114	36	25		23			
Agricultural land	% of land area	74.7	72.8	70.0	31.5	31.9		37.1			
Agricultural density	pop. per sq. km	146	156	163	116	79		62			
Forests and woodland	thou. sq. km	14	15	17	1,025	6,887		8,544			
Deforestation rate (net)	annual %	1.5	0.6	0.7	0.2	-0.4		0.0			
Access to safe water	% of pop.	..	..	99.0	..	79.7		..			
Urban		..	..	100.0	..	90.4		..			
Rural		..	..	98.0	..	63.2		..			

Table 8a Selected Welfare Indicators, 1982-87

Year	Death Rate of Babies younger than 1 year (percent)	Life Expectancy at birth (years)	
		Men	Women
1982	20.0	65.6	73.2
1983	19.0	65.1	73.0
1984	20.4	65.1	73.2
1985	20.4	65.1	73.1
1986	19.0	65.3	73.2
1987	17.3	65.7	73.7

Source: Andorka, Kolosi, Vukovich: Társadalmi report 1990, (Social Report 1990) and Statistical Évkönyv (Statistical Annual) vols. 1982-88.

Source: World Bank (1990), Social Indicators of Development.

Table 9

*Estimated Poverty Rates for Total Population, 1978-87*  
(percent)

Year	Hungary
1978	15.4
1979	n.a.
1980	13.8
1981	n.a.
1982	14.8
1983	16.7
1984	n.a.
1985	15.7
1986	n.a.
1987	13.8

n.a. Not available.

Note: Data are for population living below the poverty line as a percentage of the total population.

Source: Author's calculations based on data from country governments (see appendixes A and B).

Table 10

*Poverty Rate, by Social Group, 1978-87*

Country and year	Percentage of population in each category with income below poverty line			
	Farmers	Mixed	Workers	Pensioners
<i>Hungary</i>				
1978	n.a.	n.a.	n.a.	21
1980	n.a.	n.a.	n.a.	17
1982	n.a.	n.a.	n.a.	13
1983	n.a.	n.a.	n.a.	18
1985	14	n.a.	18	14
1987	11	n.a.	17	11

n.a. Not available.

Note: For Hungary, farmers category includes mixed households. For Yugoslavia, workers category includes pensioners.

Source: Country governments (see appendixes A and B).

Table 11: FACTORS DETERMINING INCOME OF POOR AND NONPOOR HOUSEHOLDS

	Average income households	Households under the poverty line
<b>In 100 Households:</b>		
the number of male active earners	93	93
the number of female active earners	90	57
Total	183	150
number of inactive adults	33	39
number of dependants	83	239
Total	299	428
Average yearly gross earning per household (1000 Ft.)	134.1	76.3
Average pension of inactives, Ft./mo.	5417	4667
Average per capita net income (Ft./month) in inactive households	7750 6800	3060 3080

Source: Ministry of Finance and Central Statistics Office, "The Hungarian Social Policy Systems and Distribution of Incomes and Households," Budapest 1990, Table 1.3/a.

Table 12: Real Per Capita Indicators, by Type of Household, 1987  
(1978=100)

<i>Indicator</i>	<i>Poland</i>	<i>Hungary</i>
<i>Macro indicators</i>		
Domestic demand <sup>a</sup>	87.9	103.6
Consumption	98.0	126.1
Wages <sup>b</sup>	71.1	101.0
Pensions	83.2	120.4
<i>Household surveys</i>		
Workers <sup>c</sup>	67.8	103.9
Farmers	81.5	101.0
Mixed households	84.5	n.a.
Pensioners	82.6	118.2

n.a. Not available.

Source: Milanovic (1991).

Table 13: THE DISPERSION OF INCOME  
(per capita personal income distribution)

	1962	1972	1982	1987	1989*
The share of decile in the income:					
1st decile	3.6	4.0	4.9	4.5	4.7
2nd decile	5.6	5.9	6.4	6.0	6.2
9th decile	14.1	14.0	13.7	13.8	13.8
10th decile	20.7	19.7	18.6	20.9	20.7
The 10th decile as percentage of the 1st					
Total population	575	493	379	464	440

\* Data from micro-simulation estimates; extrapolation made on basis of the 1987 Income survey records and macro data.

Source: Ministry of Finance and Central Statistics Office, "The Hungarian Social Policy Systems and Distribution of Incomes and Households," Budapest 1990, Table 4/a.

Table 14: Selected Debt Indicators, Hungary, 1980-90.

Bank and IDA Ratios	1980	1985	1986	1988	1989	1990
<b>Share of Total Long-Term DOD (Conv incl IMF)</b>						
IBRD as % of Total	..	3.40	4.69	7.06	7.47	8.00
IDA as % of Total	..	..	..	..	..	..
IBRD+IDA as % of Total	..	3.40	4.69	7.06	7.47	8.00
<b>Share of Total LT Debt Service (Conv incl IMF)</b>						
IBRD as % of Total	..	0.66	0.99	3.73	4.36	5.05
IDA as % of Total	..	..	..	..	..	..
IBRD+IDA as % of Total	..	0.66	0.99	3.73	4.36	5.05
<b>DOD-to-Exports Ratios</b>						
Long-Term Debt/Exports	..	109.96	120.59	132.14	132.04	165.66
IMF Credit/Exports	..	9.70	9.35	5.22	3.56	2.92
Short-Term Debt/Exports	..	31.21	32.70	28.64	26.52	26.72
LT+IMF+ST DOD/Exports	..	150.86	162.65	166.00	162.12	195.31
<b>DOD-to-GDP Ratios</b>						
Long-Term Debt/GDP	..	53.38	55.95	57.47	58.15	57.17
IMF Credit/GDP	..	4.71	4.34	2.27	1.57	1.01
Short-Term Debt/GDP	..	15.15	15.17	12.46	11.68	9.22
LT+IMF+ST DOD/GDP	..	73.24	75.47	72.20	71.40	67.40
<b>Debt Service Ratios (DS/Exp)</b>						
Public & Guaranteed LT	..	37.19	39.95	28.14	27.62	35.53
Private Non-Guaranteed LT	..	..	..	..	..	..
Total LT Debt Service	..	37.19	39.95	28.14	27.62	35.53
IMF Repurchases + Serv.Chgs.	..	1.72	1.18	3.34	2.13	3.22
Interest Only on ST Debt	..	..	..	..	..	..
Total (LT+IMF+ST Int.)	..	..	..	..	..	..

Source: World Bank, Trends in Developing Economies, 1991.

Table 15: Proportion of Economic Active Population, 1970-89

Year	Ratio of Active Wage Earners to Population	Ratio of Active Wage Dependents to Male Population	Ratio of Active Wage Dependents to Female Population	Number of Inactive wage Earners per 100 Active Wage Earners
1970	48.3	58.6	38.6	107
1980	47.3	55.3	39.9	111
1984	46.1	53.5	39.5	117
1988	45.5	51.1	40.4	120

TABLE 15a: Distribution of Male and Female Populations by Labor Force Status, 1970-89

Year	Active wage earner	Inactive wage earner	Dependents studying	Dependents Not Studying	Total
<b>Male population aged between 15 and 60</b>					
1970	85.6	2.6	10.6	0.9	100.0
1980	85.9	5.1	7.9	1.1	100.0
1984	86.2	5.8	7.1	1.2	100.0
<b>Female population aged between 15 and 54)</b>					
1970	64.3	5.6	8.7	21.4	100.0
1980	73.2	12.2	7.8	6.8	100.0
1984	73.8	10.9	8.3	7.0	100.0

Source: Andorka: Social Report 1990.

TABLE 16

DISTRIBUTION OF ACTIVE EARNERS AS PER THE  
BRANCHES OF THE NATIONAL ECONOMY

BRANCH OF THE NATIONAL ECONOMY	1949	1960 T H O U S A N D	1970	1980 P E O P L E	1987	PERCENT
1. Industry	792.9	1328.6	1813.2	1724.6	1526.2	31.2
2. Building industry	91.1	289.1	370.0	413.0	341.5	7.0
3. Agriculture and forestry	2195.5	1831.9	1216.9	940.1	942.7	19.3
4. Transportation, post, telecom.	180.5	308.5	363.1	412.5	404.3	8.3
5. Trade	214.8	297.7	394.7	495.6	514.2	10.5
6. Water management	4.4	10.8	59.1	76.6	79.2	1.6
7. Personal and eco- services /a	144.4	117.5	137.8	199.3	228.9	4.7
8. Health, social and cultural serv.	152.7	268.8	362.4	540.7	610.8	12.5
9. Communal, administra- tive and other services	308.2	306.8	362.4	540.7	610.8	12.5
T O T A L	4084.9	4758.6	4988.7	5068.0	4885.2	100.0

NOTE: a/ Together with other material activities.

SOURCE: Ministry of Labor

Source: World Bank, No. 9183 - HU (1991).

Table 17: Distribution of Active Wage-earners, by Age Group and by Township, 1987  
(in percent)

Age Group	Budapest	Towns and Cities	Villages
	Men		
19 years and under	4.4	5.4	6.7
20-24 years	7.7	9.4	11.0
25-34 years	26.9	27.6	26.5
35-44 years	29.3	28.3	25.0
45-54 years	22.5	21.3	21.6
55-59 years	8.0	7.2	8.7
60 years and over	1.1	0.7	0.6
Total	100.0	100.0	100.0
Women			
19 years and under	4.6	5.1	7.7
20-24 years	7.8	8.0	7.9
25-34 years	24.6	27.2	25.2
35-44 years	34.3	33.3	29.7
45-54 years	26.1	24.9	27.7
55-59 years	1.9	1.1	1.2
60 years and over	0.6	0.2	0.6
Total	100.0	100.0	100.0

Source: 'A Keresetek Színvonala' (The Level of Earnings) KSH, 1991

**Table 18 : Distribution of Wage Earners, by Education Level and by Sex, 1982 and 1987  
(in percent)**

Level of Education	MEN		WOMEN	
	1982	1987	1982	1987
Primary School uncompleted	12.6	7.1	11.9	6.5
completed*	31.3	29.6	38.6	36.5
Secondary Level Technical School	27.1	31.4	11.6	14.8
Secondary Grammar School	6.9	6.8	15.2	16.6
Comprehensive School	11.4	12.8	12.8	14.1
College	4.9	5.5	6.3	7.2
University	5.9	6.8	3.7	4.2
Total	100.0	100.0	100.0	100.0

a. Completed schooling refers to attendance of at least 8 classes.

Source: 'The Level of Earnings' (KSH 1986, 1991).

Table 19: Composition of Employed Wage-earners by Sex and Occupational Group, 1982-87<sup>a</sup>

Occupational Group	MEN		WOMEN	
	1982	1987	1982	1987
Managers	4.1	3.9	1.8	2.4
Executives	6.3	6.6	3.7	4.3
Top level experts	7.2	7.8	7.5	11.4
Other Specialists	6.1	5.2	23.8	17.8
Office Workers	1.1	1.0	11.3	11.1
Mental workers Total	24.8	24.5	48.1	47.0
Skilled Workers	47.6	47.8	14.2	17.3
Semi-skilled Workers	15.4	14.6	21.5	21.5
Unskilled workers	9.5	9.6	15.1	12.9
Total of non-agricultural physical workers	72.5	72.0	50.8	51.7
Agricultural Physical Workers	2.7	3.5	1.1	1.3
Total	100.0	100.0	100.0	100.0

a. Employment outside cooperative agriculture.

Source: KSH, 'The Level of Earnings,' 1986 and 1991.

**Table 20: Number of Registered Unemployed and their Distribution by Occupational Groups, as of September 1991.**

Occupational Group	Number of			Distribution (in percent)		
	Men	Women	Total	Men	Women	Total
Skilled Worker	70,974	19,260	90,234	78.7	21.3	100.0
Semi-skilled Worker	29,843	35,420	65,263	45.7	54.3	100.0
Unskilled Worker	48,821	30,528	79,349	61.5	38.5	100.0
Physical Worker	149,638	85,208	234,846	63.7	36.3	100.0
Top Manager	320	73	393	81.4	18.6	100.0
Middle Manager	3,950	1,469	5,419	72.9	27.1	100.0
Low Level Manager	4,121	1,615	5,736	71.8	28.2	100.0
Office Manager	7,985	14,951	22,846	34.6	65.4	100.0
Office Worker	4,800	18,716	23,516	20.4	79.6	100.0
White Collar Worker	21,086	36,824	57,910	36.4	63.6	100.0
<b>Total</b>	<b>170,724</b>	<b>122,032</b>	<b>292,756</b>	<b>58.3</b>	<b>41.7</b>	<b>100.0</b>

Source: E. Fülöp: 'Munkaerőpiaci Helyzetkép 1991/10' ('The Labour Market Situation 1991/10') National Labour Centre 1991.

Table 21 Number of Registered Unemployed, by Age Group, as of September 1991

Age Group	Unemployed	Distribution
15 and under	2,565	0.9
17-20 years	44,447	15.2
21-25 years	41,446	14.2
26-35 years	78,278	26.7
36-55 years	118,055	40.3
56-60 years	7,856	2.7
60 and over	110	0.0
<b>Total</b>	<b>292,757</b>	<b>100.0</b>

Source: E. Fülop: op. cit.

TABLE 22: MONTHLY BASIC WAGES, PER CAPITA LABOR COSTS TO EMPLOYERS,  
AND ACTUAL EARNINGS BY OCCUPATION

DENOMINATION 2/	AVERAGE BASIC SALARY		AVERAGE INCOME I (STANDARDIZED) 1/		AVERAGE INCOME II (ACTUAL)	
	LEVEL HUF 3/	RELATIVE SIZE (%)	LEVEL HUF 3/	RELATIVE SIZE (%)	LEVEL HUF 3/	RELATIVE SIZE (%)
Unskilled laborers	3238	100.0	4371	100.0	4711	100.0
Semi-skilled laborers	3755	116.0	5273	120.6	5839	123.0
Skilled laborers	4620	142.7	6490	148.5	7097	150.6
All manual laborers	4151	128.3	5815	133.1	6370	135.4
Management clerks	5687	175.6	7081	162.0	7197	152.8
Administrative clerks	4288	132.7	5116	117.0	5193	110.2
All clerks	5208	160.8	6403	146.5	6506	138.1
Production managers	6155	190.1	8394	192.0	9315	197.7
Mid-level managers in enterprises	8638	266.8	12389	283.4	12442	264.1
Mid-level managers in cooperatives	7328	226.3	9853	225.4	9912	210.4
All mid-level managers	8490	262.2	12102	276.9	12156	258.0
Top executives in enterprises	12993	395.1	20702	473.6	20756	440.6
Top executives in cooperatives	10608	327.6	17110	391.4	17125	363.5
All top executives	12346	381.3	19967	456.8	20013	424.8
All clerks and mid-level managers	5733	177.1	7391	169.1	7676	162.9

## N O T E S:

1/ Labor costs to employers.

2/ Actual earnings including various benefits, profit premia etc.

3/ HUF= Hungarian forint.

SOURCE: Ministry of Labor

Source: World Bank, 9183 - HU (1991) p. 41

Table 23: Number of Unemployed and Beneficiaries of Support Programs

	<u>1989</u> (Actual figures)	<u>September 1990</u>	
	Total during year	Stock	
<b>Total Registered Unemployed</b>	28,500	(100%)	57,091
(as percent of labor force)	(0.6%)		(1.1%)
of which:			
Received Unemployment Benefit	12,000	( 42%)	35,919
Received Temporary Allowance	none		1,660
Other* or no support	16,500	( 58%)	19,512
	<u>end-1990 (stock)</u> (9/90 projection)	<u>end-1991 (stock)</u> (2/91 projection)	
<b>Total Registered Unemployed</b>	100,000	(100%)	200-250,000
(as percent of labor force)	(2.0%)		(4-5%)
of which:			
Obtain Unemployment Benefit	76,000	( 76%)	(75-80%)
Obtain other* support	28,000	( 28%)	
<b>*Breakdown of Employment Fund Programs, 1990</b>	<u>Ft. bn</u>	<u># beneficiaries</u>	
		(flow)	
Unemployment benefit/Temp. Allowance	3.0	na	
Interest subsidies for Start-up Loans	2.5	**	
Retraining	1.0	30,000	
Subsidies to regions with large unemploymt.			
and for job-creating investments	1.0	**	
Public works employment	1.0	4,050	
Early retirement	1.0	4,200	
Wage subsidies for young professionals	0.2	**	
Employment services	0.3	na	
<b>Total</b>	<u>10.0</u>	**subtotal of new jobs created - 10,000	

Actual figures supplied by Ministry of Labor, projections from National Labor Market Center.

Table 24a Unemployment Benefit Scheme in Place from 1/1989 to 3/1/91**Eligibility**

(a) Unemployment Benefit:	18 months employment in the 3 years prior to claim
(b) Temporary Allowance:	Expired entitlement to Unemployment Benefit

**Duration of Benefit**

(a) Unemployment Benefit:	12 months in a 3 year period
(b) Temporary Allowance:	12 months

**Benefit Rate**

(a) Unemployment Benefit:	(i) 70% of previous gross earnings for first 6 months, then 60%. These rates are 65% and 55% in the event of voluntary quitting when notice is given and 60% and 50% if no notice is given. (ii) minimum benefit is 80% of the minimum wage and maximum benefit is three times the minimum wage.
(b) Temporary Allowance:	(i) 75% of previous unemployment benefit i.e. 45% of previous gross earnings (less for voluntary quitters) (ii) maximum of twice the minimum wage

**Deductions from Benefit**

Both benefits are subject to income tax and a 5% social insurance deduction (rather than the 10% paid while in employment).

**Financing**

Paid from the Employment Fund which receives transfers direct from the State Budget.

Source: World Bank, 9349 - HU.

Table 24b Unemployment Benefit Scheme Effective 3/1/91**Eligibility**

(a) Unemployment Insurance: 12 months insured employment in the 4 years prior to claim

(b) Career Beginners Benefit: (i) Diploma obtained from a secondary or higher education or training institution within the 24 months prior to claim.  
 (ii) registered unemployed for at least 3 months

**Duration of Benefit**

## (a) Unemployment Insurance

Period of Insured Employment in the previous 4 years		Period of Benefit	
		Phase I	Phase II
360-479	days	90	days
480-599	..	120	..
600-719	..	150	..
720-839	..	180	..
840-959	..	210	..
960-1079	..	240	..
1080-1199	..	270	..
1200-1319	..	300	..
1320-1439	..	330	..
1440 +		360	..

(b) Career Beginners Benefit: 6 months

**Benefit Rate**

(a) Unemployment Insurance: (i) For first half of the entitlement period ("Phase I"), 70% of gross earnings during last 12 months of employment. 50% of same earnings base in the second half ("Phase II").  
 (ii) minimum benefit is the prevailing minimum wage (or previous wage with the last employer if lower than the minimum wage); maximum benefit is three times the minimum wage.

(b) Career Beginners Benefit: 75% of the prevailing minimum wage.

**Deductions from Benefit**

Both benefits are subject to income tax and a 5% social insurance deduction (rather than the 10% paid while in employment).

**Financing**

Paid from the Solidarity Fund financed by employer and employee contribution.

Table 25 - Hungary: Social Expenditures  
Bln Ft

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Pensions	27.1	32.3	36.3	40.0	46.3	56.0	61.2	60.5	75.0	64.1	91.7	69.3	110.0	130.0	156.4	202.5
Sickness benefit	6.9	6.7	6.9	7.6	6.1	6.5	9.1	9.7	10.7	11.0	11.6	12.6	13.3	16.7	21.4	24.5
Family allowance	6.4	7.5	8.5	6.8	10.5	13.6	14.6	14.9	16.0	19.4	21.3	21.5	23.2	37.0	52.8	63.2
Pregnancy/parenthood benefits	1.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.6	3.7	4.1	4.6
Childcare allowance	3.9	3.5	3.8	3.7	3.7	3.9	3.7	3.5	3.4	3.4	2.8	2.8	2.0	2.0	1.9	2.7
Childcare fee	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	3.4	4.1	6.3
Scholarships	0.7	0.7	0.8	0.8	0.9	1.0	1.0	1.2	1.1	1.4	1.6	1.6	1.7	1.5	1.6	2.6
Other cash social income 1/	1.6	1.5	1.7	1.6	2.0	2.1	2.4	2.6	3.8	4.4	4.7	4.9	5.7	6.1	6.6	17.6
o/w: regular social support	0.3					0.6					0.9	0.9	1.0	1.2	1.4	1.9
Irregular social support	0.05					0.2					0.9	0.9	0.9	0.9	1.6	1.7
Employment Fund benefits in cash 6/	47.4	54.1	59.8	64.5	75.4	87.0	93.9	102.4	111.8	125.6	137.3	148.1	162.8	206.3	257.1	335.7
<u>Social Income in kind</u>																
of which:																
Health 2/	10.0	11.6	12.6	14.3	16.0	23.6	27.4	30.7	32.6	35.9	40.6	45.1	50.0	57.2	71.0	93.4
of which: Pharmaceutical Subsidies																
Social services, nurseries	2.0	2.3	2.6	2.9	3.3	3.9	3.6	4.3	7.2	8.4	9.7	12.0	13.8	15.6	18.2	19.3
Education, Kindergarten	15.3	16.2	17.7	21.1	22.1	25.3	28.3	31.6	33.3	36.4	40.1	42.0	45.6	55.8	75.1	94.0
Culture, Sports 3/	3.8	4.6	5.6	6.3	7.1	8.0	9.6	10.4	12.2	13.3	15.0	16.2	17.5	20.6	19.1	19.9
Employment Fund benefits in kind 6/																
<u>Total Social Income</u>	83.4	93.0	102.6	114.0	129.2	153.1	168.5	185.4	201.0	223.2	246.3	265.2	291.3	337.6	436.9	564.4
<u>Consumer Subsidies 4/</u>																
Housing Assistance 5/																
<u>Total Social Expenditures</u>																
<u>Memorandum Items:</u>																
Total Household Income	366.9	327.6	339.5	389.6	422.6	461.8	501.2	539.2	581.3	634.0	688.5	740.6	807.0	920.7	1088.1	1300.4
(GDP (Bln of Current Ft)	482.7	528.9	562.0	629.7	682.3	721.0	779.7	847.9	898.4	978.4	1033.7	1088.5	1226.4	1409.5	1716.7	2041.6
(GDP (Bln of 1981 Prices)	640.0	682.2	708.8	739.3	750.5	751.0	772.6	794.5	800.3	821.5	819.4	832.0	865.7	885.2	898.5	807.4
(GDP Deflator (1981 = 100.0))	75.4	79.9	82.3	85.2	90.9	96.0	100.9	106.7	112.0	119.1	125.2	130.9	141.7	162.9	198.6	252.9

Sources: Data for 1975-85 from CSO Statistical Yearbook; for 1989-90, Social Security Administration, other government officials and Staff estimates. For growth rates and percentage distributions of above data, see Tables II.3a-c.

1/ Includes compensation for pharmaceuticals, therapeutic equipment in 1975-78. Data on subsidies for 1980-87 from MEF Fiscal Affairs Dept, "Social Security Reform in Hungary".

2/ Does not include compensation for pharmaceuticals, therapeutic equipment up to 1986.

3/ Data up to 1987 from Ministry of Health & Social Affairs, February 1989. The 1988-89 data from SAL Preparation Mission November 1989; 1990 figure from Ministry of Finance. Includes subsidies for milk and dairy products, household energy, transportation, water supply and sewerage, and culture. To make comparable with data from earlier years, rental subsidies are also included here.

4/ Data up to 1987 from Ministry of Health & Social Affairs, February 1989. The 1988-89 data from SAL Preparation Mission November 1989; 1990 figure from Ministry of Finance. The figure for 1989 includes interest subsidy on pre-1986 housing loans carried over from 1988. 'Assistance' includes interest subsidy on pre-1986 and post-1986 housing loans and 'social policy' grants for housing construction. Amortisation of state-owned dwellings is included in Total Social Income in kind.

5/ Created in 1988. Fund covers unemployment compensation, restraining allowances, public works for job creation, early retirement, interest and risk guarantees for loans for new entrepreneurs, and administrative costs of Employment Services, Youth Employment Scheme, job creation subsidies to investors, and special funds for regions of critical unemployment.

MEFP.MK1 (Actual Values)

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Table 26: Consumer Price Index, by Community Groups, 1979-90  
(1978=100)

Commodity Group	1979	1980	1981	1982	1983	1984
Food	110.2	125.0	129.2	135.4	142.3	159.5
Alcohol, Tobacco	112.4	114.3	117.3	132.7	141.6	148.7
Clothing	109.0	114.4	121.3	128.0	136.1	151.1
Heating and Household Energy	108.8	132.1	131.8	145.0	152.1	159.6
Durable Consumer Goods	108.3	122.6	123.9	126.5	136.4	143.4
Other Consumer Goods	108.0	118.3	128.9	137.2	150.0	161.0
Services	103.4	110.6	117.8	126.3	139.1	150.2
 Total	 108.9	 118.8	 124.3	 132.9	 142.6	 154.4
Commodity Group	1985	1986	1987	1988	1989	1990
Food	169.5	172.9	188.8	218.6	257.3	347.9
Alcohol and Tobacco	151.2	159.1	180.6	206.4	229.3	299.7
Clothing	167.6	188.4	201.2	241.4	285.3	351.8
Heating and Household Energy	193.0	199.8	212.8	240.0	267.4	341.2
Durable Consumer Goods	151.5	160.7	164.4	178.4	209.5	348.7
Other Consumer Goods	170.5	178.9	190.0	221.0	270.5	348.7
Services	164.2	178.8	194.9	229.0	267.0	335.4
 Total	 165.2	 174.0	 189.0	 218.0	 255.4	 329.2

Source: Consumer Price Index Booklet No.8, KSH 1991.

**TABLE 27: EXPENDITURE OF EDUCATIONAL INSTITUTIONS 4/ (FORINT MILLION; CURRENT PRICES)**

#### NOTES:

1/ Budget from Ministry of Finance  
2/ Budget from National Planning Office  
3/ Total public spending includes all expenditures by public institutions, social security, interest and production and price subsidy payments.  
4/ All figures correspond to expenditures strictly related to higher education activities. Since many higher education institutions undertake activities outside higher education, figures shown here are smaller than those given for total expenditures by higher education institutions.

SOURCE: Ministry of Finance, National Planning Office, Ministry of Education

Source: World Bank, 9183 - HU (1991) p. 53

TABLE 28: ENROLLMENT AND TEACHING STAFF IN EDUCATION

	1983/4	1984/5	1985/6	1986/7	1987/8	1988/9	1989/90
<b>I. PRIMARY</b>							
Number of Institutions	3,546	3,539	3,546	3,540	3,540	3,526	3,527
Enrollment	1,269,899	1,286,648	1,297,818	1,299,455	1,277,257	1,242,672	1,183,573
Growth	1.32%	0.87%	0.13%	-1.71%	-2.71%	-4.76%	
Teaching Staff	83,496	86,367	86,066	89,611	90,925	90,620	90,602
Growth	3.44%	-0.35%	4.12%	1.47%	-0.34%	-0.02%	
Student-Teacher Ratio	15.21	14.90	15.08	14.50	14.05	13.71	13.06
<b>II. SECONDARY</b>							
II-1. Secondary Schools							
Number of Institutions	545	553	561	587	608	645	675
Enrollment	225,308	232,342	236,104	236,881	239,768	248,337	273,511
Growth	3.12%	1.62%	0.33%	1.22%	3.57%	10.14%	
Teaching Staff	16,889	17,466	17,899	18,527	19,184	20,084	21,425
Growth	3.42%	2.48%	3.51%	3.55%	4.69%	6.68%	
Student-Teacher Ratio	13.34	13.30	13.19	12.79	12.50	12.36	12.77
II-2. Apprenticeship Schools 1/							
Number of Institutions	269	270	274	278	284	294	299
Enrollment	174,810	178,044	176,380	175,228	177,191	186,796	201,702
Growth	1.85%	-0.93%	-0.65%	1.12%	5.42%	7.98%	
Teaching Staff	11,090	11,397	11,505	11,591	11,651	11,745	12,044
Growth	2.77%	0.95%	0.75%	0.52%	0.81%	2.55%	
Student-Teacher Ratio	15.76	15.62	15.33	15.12	15.21	15.90	16.75
<b>III. HIGH</b>							
Number of Institutions	58	58	58	54	54	58	57
Enrollment (regular students)	62,944	63,217	64,190	64,855	66,697	71,689	72,381
(evening students)	6,539	6,119	6,203	6,040	5,851	5,540	5,255
(correspondent students)	30,382	30,650	28,951	27,610	26,477	25,812	23,187
Evening and Corresp. Sub-total	36,921	36,769	35,154	33,850	32,328	31,352	28,442
Total Students	99,865	99,986	99,344	98,505	99,025	103,041	100,623
Growth of regular students	0.4%	1.5%	1.0%	2.8%	7.5%	1.0%	
Growth of all students	0.1%	-0.6%	-0.8%	0.5%			
Teaching Staff	14,452	14,545	14,850	15,111	15,302	16,242	16,319
Growth	0.6%	2.1%	1.8%	1.3%	6.1%	0.5%	
Student-Teacher Ratio	4.36	4.35	4.32	4.29	4.36	4.41	4.44
Student-Teacher Ratio 2/	5.06	5.04	4.98	4.91	4.94	4.95	4.92

## NOTES:

1/ Excludes typing, stenography, and health care training

2/ Using full time equivalent (FTE) figures. FTE is defined as: Regular Students + 1/2.5(Evening Students) + 1/4(Correspondent Students)

SOURCE: Ministry of Education and Culture

Table 29  
Housing Conditions in Hungary

	1970	1980	1984
<u>Amenities</u>			
(Share of Stock)			
Dwellings with piped water	35.1	62.7	97.6
Equipped with indoor plumbing	26.4	51.4	65.7
Equipped with town gas	16.0	25.1	30.4
Bathroom or shower	30.8	58.5	73.0
<u>Households/ Dwellings</u>			
Number of households by 100 dwellings	108	105	102
Number of rooms by 1000 persons	496	659	768

Source: The Housing Situation in Hungary, Ministry of Interior, Budapest, Hungary, 1990. Cited in Rpt. No. 9031 - HU, 1991.

**Table 30**  
**Subsidies to the Housing Sector in 1989**

<u>A. Recognized subsidies</u>	Amount (Ft. Billions)
1. Construction of rental flats	6.4
2. Maintenance of public rental flats	8.6
-- from state budget	5.5
-- local council subsidies	
3. Local council subsidy for preparation of building plots, infrastructure	7.0
4. Socio-political allowances (assistance with downpayments)	10.0
5. Interest rate subsidies for loans issued before 1989	41.1
6. Subsidy for early mortgage prepayment	2.0
7. Interest rate subsidy for loans issued in 1989 and after	1.5
Subtotal	82.1

B. "Off budget subsidies"

1. Homeownership grants from employers	8.0
2. Homeownership grants from local councils*	3.0
3. Unmeasured rent subsidies	33.0
Subtotal	44.0
Total	126.1

\* Includes both grants and the principal of low interest rate loans made that year. Data for valuing the interest subsidies on all outstanding loans are not available.

Source: National Planning Organization and National Bank of Hungary Cited  
 in Rpt. No. 9031 - HU, 1991.

Table 31  
 Occupation of Head of Household in State Rental and  
 Owner-Occupancy Sectors

	Rental Sector	Home Sector	Among Renters % With 3+ Rooms
Managers, intellectuals	6.1	4.9	15.0
White collar worker	14.8	9.2	10.8
Shop-floor managers	1.7	2.0	5.0
Skilled worker	17.5	21.4	4.6
Semi-skilled worker	8.2	9.6	4.0
Unskilled worker	4.1	3.9	4.5
Agricultural workers	.4	5.6	-
Self employed	1.3	2.7	11.2
Retired	39.1	32.8	5.1
Dependent	2.3	1.8	2.9
Vacant units	4.3	6.3	2.9
Totals	100	100	6.3

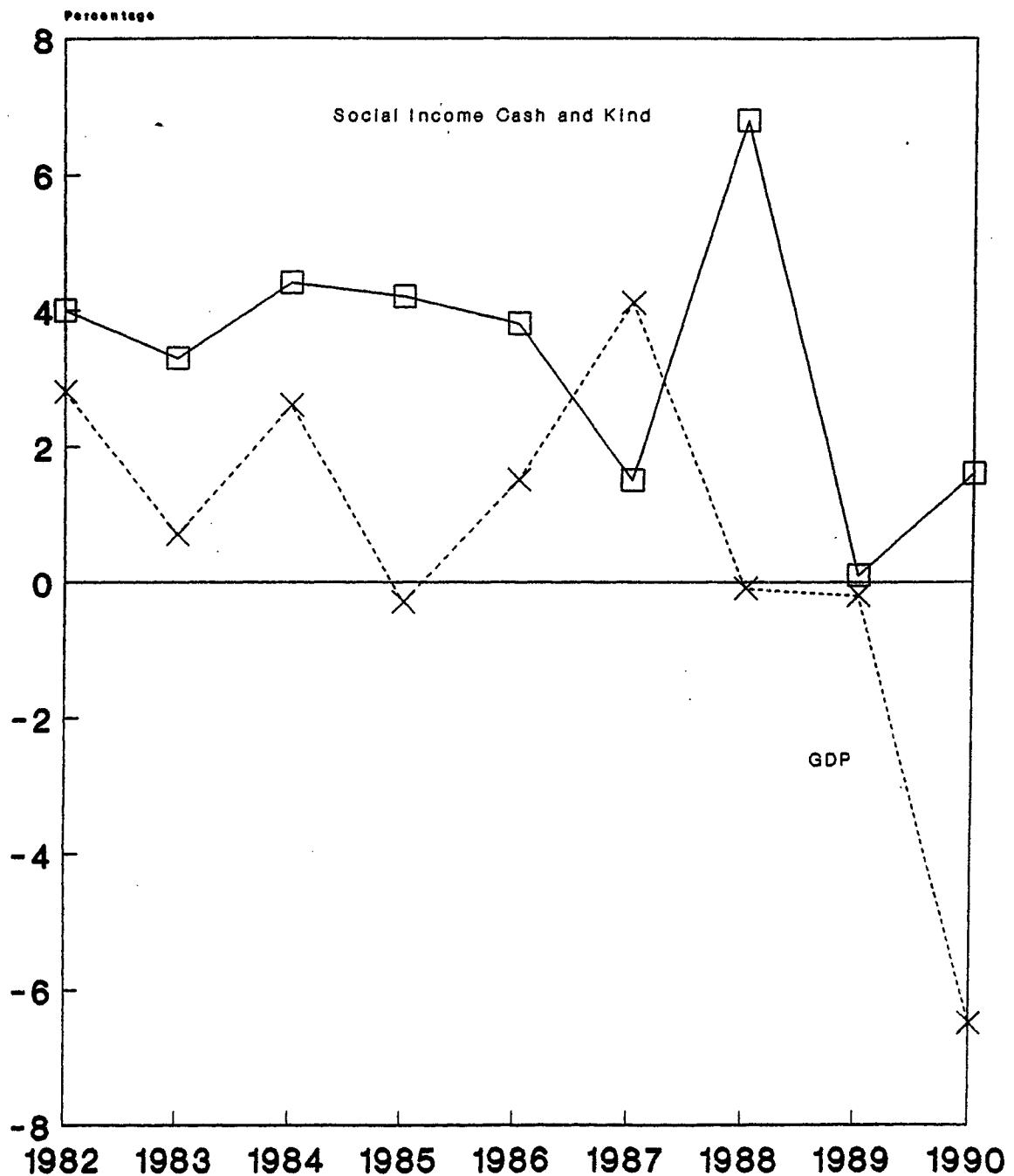
Source: Hegedus and Tosics, "Hungarian State-Rental Sector...", Table 8,  
 p. 17. Cited in Rpt. No. 9031 - HU, 1991.

Table 32: INDICATORS OF HOUSING OF POOR AND NON-POOR HOUSEHOLDS

	Active Households		Inactive Households	
	Average Income	Under Poverty Line	Average Income	Under Poverty Line
Dwelling size (sq. m)	74.4	68.4	67.9	59.2
Room Number (in percent)				
No room	0.2	0.6	0	0.3
1 room	6.9	14.2	21.9	25.8
2 rooms	45.5	46.7	51.9	43.6
3 rooms	37.5	33.2	23.3	26.2
4 and more rooms	9.9	5.3	2.9	3.5
Proportion of state owned rented dwellings	17.6	19.0	28.0	19.1
Portion of dwellings both with bathroom and WC	88.2	64.1	81.6	40.9
Without bathroom and WC	6.5	30.6	13.2	48.1
With running water	95.4	73.8	92.0	63.1
With telephone	18.6	5.3	19.4	7.1
With traditional heating	19.7	46.3	34.7	69.1

Source: Ministry of Finance and Central Statistics Office,  
 "The Hungarian Social Policy Systems and Distribution  
 of Incomes of Households," Budapest, 1990, Table 1.4.1/a.

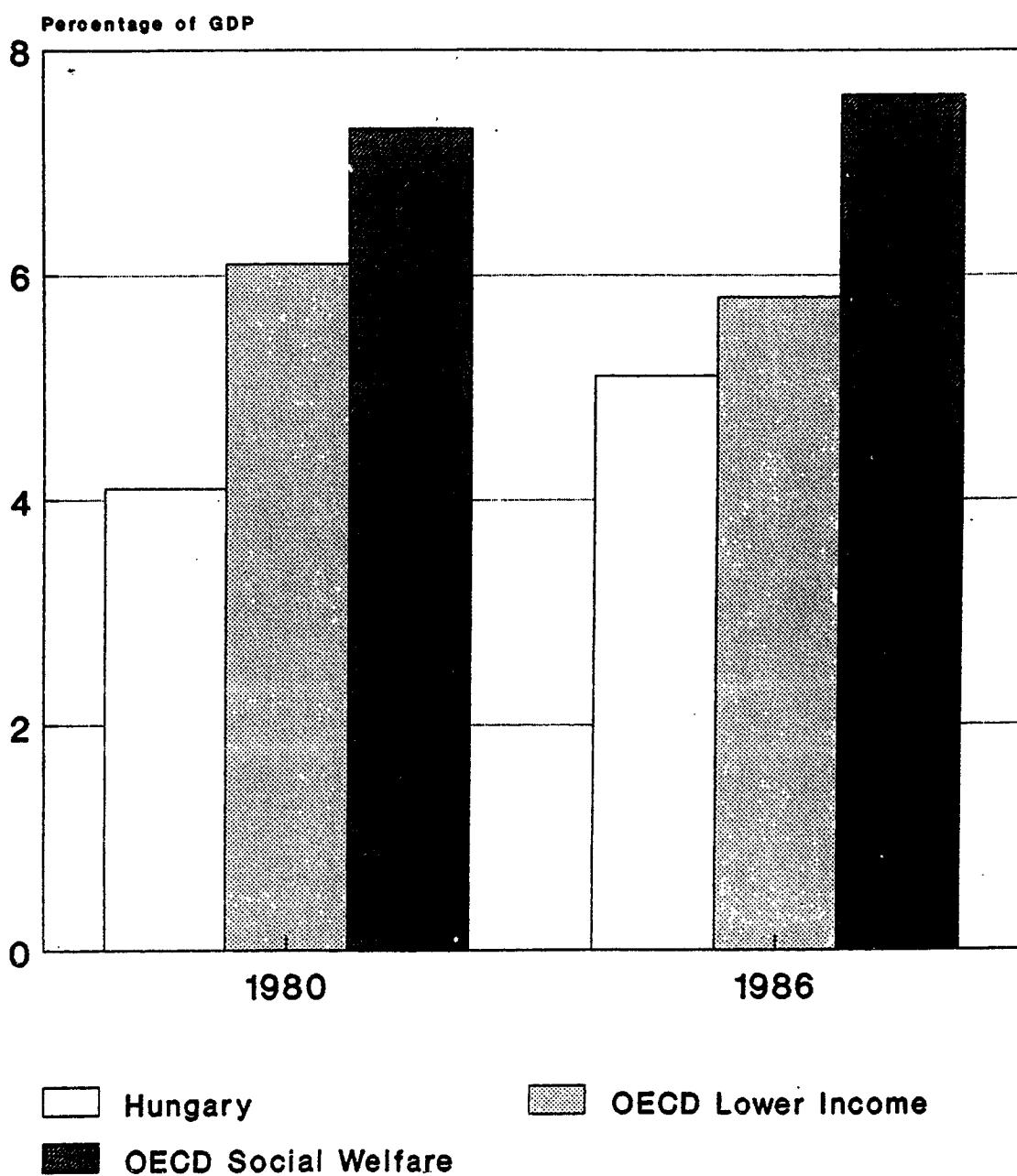
**Figure 1**  
**Growth Rates of Social Income and GDP**



**Source: Table 29:**

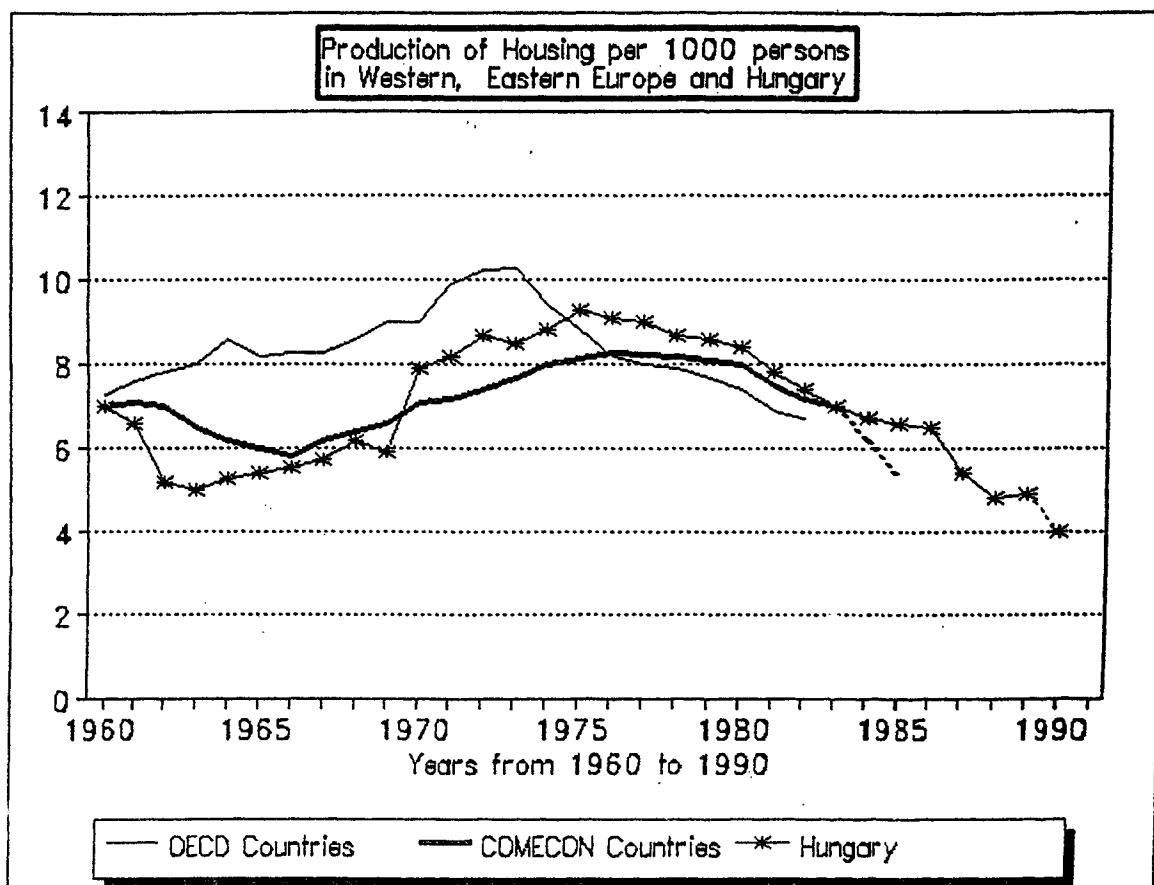
World Bank (1991), Report 9349-HU

**Figure 2**  
**National Health Expenditure**  
**as Percentage of GDP**



**Source:** World Bank (1991), Report No. 9349 - HU.

FIGURE 3



Source: The Figure is from Ivan Tosics, "Privatization in Housing Policy: The Case of the Western Countries and that of Hungary." (1987). Cited in World Bank, 1991a.